

The Arte of warre,
written first in Italiã
by Nicholas Machiavell, and set
forthe in English by Peter
Whitchoorne, student at Seates Inne:
with an additiõ of other like Mar-
cialle seates and experimens
tes, as in a Table in the
ende of the Booke
made appere.

Anno. M. D. L X.
Mensß. Iulij.



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To the moste highe, and excellent Princes,
 Elizabeth, by the grace of God, Quene
 of Englande, Fraunce, and Irelande,
 defender of the faith, and of the Church of Eng-
 lande, and Irelande, on yeareth next vns-
 der God, the supreme Gouvernour.



Although commonlie e-
 uery man, moste worthie and
 renoumed Soueraigne, seeketh
 specially to commend and ex-
 tolle the thing, whereunto he
 seleth hymself naturally bent
 and inclined, yet al soche par-
 ciallitie and pꝛiuate affection
 laid aside, it is to bee thought
 (that foꝛ the defence, maintenaunce, and aduance-
 mente of a kyngdome, oꝛ Common weale, oꝛ foꝛ the
 good and due obseruacion of peace, and administraciō
 of Justice in thesame) no one thinge to be moze pꝛo-
 fitable, necessarie, oꝛ moze honourable, then the know-
 ledge of seruice in warre, and bedes of armes: bicause
 consideryng the ambition of the worlde, it is impossi-
 ble foꝛ any realme oꝛ dominion, long to continue free
 in quietnesse and sauegarde, where the defence of the
 sword is not alwaies in a readinesse. Foꝛ like as the
 Grekes, beyng occupied aboute trisyng matters, ta-
 kyng pleasure in resityng of Comedies, and soche o-
 ther vaine thinges, altogether neglectyng Parciall sea-
 tes, gaue occasion to Philip kyng of Macedonia, sa-
 fther to Alexander the Great, to oppresse and to byng
 theim in seruitude, vnder his subiection, even so vn-
 doubtedly, libertie will not be kepte, but men shall be
 troden vnder foote, and bzought to moste horrible mi-
 serie and calamitie, if thei giuyng theim selues to pa-
 stymes and pleasure, soꝛake the iuste regarde of their
 owne defence, and sauegarde of their countrie, whiche
 in tempoꝛall regimēte, chiefly consisteth in warlike
 skillfulnesse. And therfoꝛe the aunciente Capitaines

a. y.

and

and mightie Conquerours, so longe as thei flourished,
 did deuise with moſte greate diligence, all maner of
 waies, to bryng their men to the perfect knowledge of
 what ſo euer thing appertained to the warre: as ma-
 niſteſtly appereth by the warlike games, whiche in old
 time the Princes of Grecia obtained, vpon the mount
 Olimpus, and alſo by thozders and exerciſes, that the
 aunciente Romaines vſed in ſundrye places, and ſpe-
 cially in Campo Martio, and in their wonderful ſump-
 tuous Theaters, whiche chiefly thei builded to that
 purpoſe. Whereby thei not onely made their ſouldi-
 ours ſo experte, that thei obtained with a ſewe, in
 ſaightyng againſte a greate houghe multitude of ene-
 mies, ſoche maruellous victories, as in many credible
 Hiſtozies are mencioned, but alſo by theſame mea-
 nes, their vnarmed and rascalle people that ſollowed
 their Campes, gotte ſoche vnderſtandyng in the ſea-
 tes of warre, that thei in the daſe of battaile, beeyng
 leſte deſtitute of ſuccour, were able wthout any other
 help, to ſet themſelues in good order, ſo; their defence
 againſte the enemye, that would ſeke to burte theim,
 and in ſoche dangerous times, haue doen their coun-
 trie ſo good ſeruiſe, that verie often by their helpe, the
 aduerſaries haue been put to flight, and fieldes moſte
 happely wōne. So that thantiquitie eſteemed nothing
 moze happie in a common weale, then to haue in the
 ſame many men ſkilfull in warlike affaires: by mea-
 nes whereof, their Empire continually enlarged, and
 moſte wonderfully and triumphantly prospered. For
 ſo longe as men ſo; their valiauntheſſe, were then re-
 warded and had in eſtimacion, glad was he that could
 finde occaſion to venter, pea, and ſpende his life, to be-
 nefite his countrie: as by the manly actes that Marcus
 Curcius, Diſcius Cocles, and Gaius Marcius did for
 the ſauegarde of Rome, and alſo by other innumera-
 ble like examles, dooeth plainly appeare. But when
 through long and continuall peate, thei began to bee
 altogether giue to pleaſure and delicatenefſe, little re-
 gardyng

garbyng Marshall feates, noz soche as were expert in the practise thereof: Their dominions and estates, did not so moche befoze increase and prospere, as then by soche meanes and oversight, thei sodainly fell into decaye and bitter ruine. For soche trully is the nature and condicion, bothe of peace and warre, that where in gouernemente, there is not had equalle consideration of them bothe, the one in fine, doeth toozke and induce, the others obliuion and bitter abholicion. Wherefoze, sith the necessitie of the science of warres is so greates, and also the necessarie vse thereof so manifeste, that euen Ladie Peace her self, doeth in maner from thence craue her chief defence and preservation, and the worthinesse moreouer, and honour of thesame so greates, that as by prose we see, the perfecte glozie therof, cannot easely finde roote, but in the hartes of moste noble couragious and manlike personages, I thought most excellent Prince, I could not either to the spectalle gratifying of your highnesse, the vniuersall delight of all studious gentlemen, or the common vtilitie of the publike wealth, imploie my labours more profitable in accomplishing of my duetie and good will, then in setting foorth some thing, that might induce to the augmenting and increase of the knowledge thereof: Inespeciall therampole of your highnes most politike gouernemente ouer vs, giuing plaine testimonie of the wonderfull prudente desire that is in you, to haue your people instructed in this kinde of seruice, as well for the better defence of your highnesse, theim selues, and their countrie, as also to discourage thereby, and to be able to resist the malignitie of the enemye, who otherwise would seeke peraduenture, to inuade this noble realme of kyngdome.

When therfoze about. x. yeres passe, in the Emperours warres against the Mozes and certain Turkes beyng in Barberie, at the siege & winning of Calabria, Monesterio and Africa, I had as well for my further instruction in those affaires, as also the better to

acquainte me with the Italian tongue, reduced into
 English, the booke called The arte of VVarre, of the
 famous and excellent Nicholas Machiauell, whiche in
 times past he beyng a counsaillour, and Secretarie of
 the noble Citie of Florence, not without his greate
 laude and praise did write: and hauing lately againe,
 somewhat perused thesame, the whiche in soche conti-
 nuall bzolles and vnquietnesse, was by me translated,
 I determined with my self, by publishyng thereof, to
 bestowe as greate a gift (sins greater I was not able)
 amongeste my countrie men, not experte in the Itali-
 an tongue, as in like woozkes I had seen befoze me,
 the Frenchemen, Duchemen, Spaniards, and other
 sozreine nations, mozte louyngly to haue bestowed e-
 mongeste theirs: The rather vndoubtedly, that as by
 priuate readdyng of thesame booke, I then felt my self
 in that knowledge maruclously holpen and increa-
 sed, so by communicatyg thesame to many, our En-
 glishemen findyng out the orderyg and disposyg of
 exploitcs of warre therein contained, the aide and di-
 rection of these plaine and bziefe pzeceptes, might no
 lesse in knowledge of warres become incomperable,
 then in prowes also and exercise of thesame, altoge-
 ther inuincible: which my translacon mozte gracious
 Soueraigne, together with soche other thynges, as by
 me hath been gathered, and thought good to adde
 thereunto, I haue pzeumed to dedicate vnto youre
 highnes: not onely bicause the whole charge and sur-
 niture of warlike counsailes and pzeparacions, being
 determined by the arbitrement of Governours and
 Princes, the treatise also of like effecte should in like
 maner as of right, depende vpon the protection of a
 mozte woztbie and noble Patronesse, but also that the
 discourse it self, and the woozke of a sozrein authour,
 vnder the passeport and safeconduite of your highnes
 mozte noble name, might by speciall authoritie of the
 same, winne emogest your Maiesties subiectes, mozte
 better credite and estimation. And if mooste mightie
 Queen,

Queen, in this kind of Philosophie (if I maye so terme
 it) graue and sage counsailes, learned and wittie pre-
 ceptes, or politike and prudente admonicions, ought
 not to be accepted the least and basest Iewels of weale
 publike. When dare I boldly affirme, that of many
 straungers, whiche from sozein countries, haue here
 tofore in this your Maiesties realme arrived, there is
 none in comparison to be preferred, before this wo-
 thie Florentine and Italian, who hauyng frely with-
 out any gaine of erchaunge (as after some acquaint-
 taunce and familiaritie will better appeare) brought
 with hym moste riche, rare and plentifull Treasure,
 shall deserue I trust of all good Englishe hartes, most
 louingly and frendly to be intertaind, embraced and
 cherished. Whose newe Englishe apparell, how so e-
 uer it shall seme by me, after a grosse fassion, more fit-
 lie appointed to the Campe, then in nice termes atti-
 red to the Carpet, and in course clothyng rather putte
 foorth to battaile, then in any bzaue shewe prepared
 to the bankette, neuerthelesse my good will I truste,
 shall of your grace be taken in good parte, hauyng fa-
 shioned the pphaise of my rude stile, euen accoꝝdyng to
 the purpose of my trauaile, whiche was rather to pro-
 fite the desirous manne of warre, then to delight the
 eares of the fine Rhetoricia, or daintie curious schole-
 manne: Moste humble besechyng your highnes, so to
 accept my labour herein, as the first fructes of a pooze
 souldiours studie, who to the vttermoste of his smalle
 power, in the seruice of your moste gracious maiestie,
 and of his countrie, will at al tymes, accoꝝdyng to his
 bounden duetie and allegeaunce, promptly yeld hym
 self to any labour, trauaile, or daunger, what so euer
 shal happen. Praying in the mean season the almighty
 GOD, to giue your highnes in longe prosperous
 raigne, perfect health, desired tranquillitie, and against
 all your enemies, luckie and ioyfull victorie.

Your humble subiect and dailie
 oratour, Peter VWhitchorne.

[illegible]

Station, Four, French only.

The Proheme of Nicholas Machiauell, Cite-
 zein and Secretarie of Florence, vpon his
 booke of the Arte of warre, vnto
 Laurence Philippe Strozze,
 one of the nobilitie
 of Florence.



Here haue Laurence,
 many helpe, and do holde this
 opiniõ, that there is no maner
 of thing, whiche lesse agreeth
 the one with the other, noz y
 is so much vnlike, as the ciuill
 life to the Souldiours. Wher
 by it is often seen, that if any
 determin in ther exercise of that
 kinde of seruice to preuaile, that incontinent he doeth
 not only chaunge in apparel, but also in custome and
 maner, in voice, and from the faction of all ciuill vse, he
 doeth alter: For that he thinketh not meete to clothe
 with ciuill apparell him, who will be redie, and ppoint
 to all kinde of violence, noz the ciuill customes, and v-
 sages male that man haue, the whiche iudgeth bothe
 those customes to be effeminate, and those vsages not
 to be agreable to his profession: For it semes not con-
 uenient for him to vse the ciuill gesturs and ordinari-
 woordes, who with fasing and blasphemies, will make
 afraied other menne: the whiche causeth in this time,
 suche opinion to be mooste true. But if thei should con-
 sider the ancient orders, there should nothing be folde
 moze vnited, moze confirmable, and that of necessitie
 ought to loue so much the one the other, as these: for
 as muche as all the artes that are ordeined in a com-
 mon weale, in regarde or respecte of common profite
 of menne, all the orders made in thesame, to liue with
 feare of the Lawe, and of God, should be vaine, if by

The Probleme.

force of armes their defence wer not prepared, which well ordeined, doe maintain those also whiche be not well ordeined. And likewise to the contrarie, the good orders, without the souldiours help, no lesse or other, wise doe disorder, then the habitation of a sumptuous and roiall palais, although it wer deckt with gold and p[re]cious stones, when without being couered, should not haue wherewith to defende it from the raine. And if in what so euer other orders of Cities and Kyngdomes, there hath been vsed al diligence for to maintain men faithfull, peaceable, and full of the feare of God, in the service of warre, it was doubled: for in what man ought the countrie to seke greater faith, then in him, who must promise to die for the same: In whom ought there to bee more loue of peace, then in him, whiche onely by the warre maie be hurte: In whome ought there to bee more feare of God, then in him, whiche every daie commityng himself to infinite perilles, hath moste neede of his helpe: This necessitie considered wel, bothe of them that gaue the lawes to Empires, & of those that to the exercise of service wer apointed, made that the life of Souldiours, of other menne was praised, and with all studie followed and imitated. But the orders of service of war, beyng altogether corrupted, and a greates wate from the ancient maners altered, there hath growen these sinisterous opinions, which maketh men to hate the warlike service, and to flie the conuersacion of those that dooe exercise it. Albeit I iudgeing by the same, that I haue seen and redde, that it is not a thyng impossible, to bring it again to the ancient maners, and to give it some sacion of the vertue passed, I haue determined to the entente not to passe this my well time, without doyng some thyng, to write that whiche I doe vnderstande, of the arte of warre, to the satisfaying of those, who are louers of ancient actes. And although it be a bold thing to intreate of the same matter, wher
of

of other wise I haue made no profession, notwithstanding I beleue it is no errour, to occupie with wordes a degree, the whiche many with greater presumption with their deedes haue occupied: so; as muche as the errours that I maie happen to make by writing, may be without harme to any man corrected: but those the whiche of them be made in doyng, cannot be knowen without the ruine of Empires. Therefore Laurence you ought to consider the qualittie of this my labour, and with your iudgemēt to giue it that blame, or that praise, as shall seeme vnto you it hath deserued. The whiche I sende vnto you, as well to shewe my selfe gratefull, although my habilitie reche not to the benefites, which I haue receiued of you, as also so; that heying the custome to honour with like workes them, who so; nobilitie, riches, wisdom, and liberalitie doe shine: I knowe you so; riches, and nobilitie, not to haue many peeres, so; wisdom fewe, and so; liberalitie none.

A.ij.

*The first booke of the arte of warre
 Nicholas Machiauel, citezein and
 cretarie of Florence, vnto Lauren
 Philip Strozze, one of the
 nobiltie of Florence.*



As much as I beleue
 that after death, al men maie
 be praised without charge, al
 occasion and suspecte of flatter-
 rie beyng taken awaie, I shal
 not doubt to praise our Co-
 simo Ruchellay, whose name
 was neuer remembred of me
 without teares, hauing kno-
 wen in him those condicions, the whiche in a good
 frende or in a citezen, might of his freendes, or of his
 countrie, be desired: so that I doe not knowe what
 thyng was so muche his, not excepting any thing (sa-
 uing his soule) which for his freendes willingly of him
 should not haue been spent: I knowe not what enter-
 prise should haue made him afraide, where the same
 should haue ben known to haue been for the benefite
 of his countrie. And I doe painly confesse, not to haue
 mette amongst so many men, as I haue knowen, &
 practised withal, a man, whose minde was more infla-
 med then his, vnto great & magnificent thynges. Nor
 he lamented not with his freendes of any thyng at his
 death, but because he was boorne to die a yong manne
 within his owne house, befoze he had gotten honour,
 and accordeinge to his desire, holpen any manne:
 so that he knewe, that of him coulde not be spoken o-
 ther, sayng that there should be dead a good frende.
 Yet it resteth not for this, that we, and what so euer o-
 ther

The firste booke.

ther that as we did know him, are not able to testifie
(seeing his woorkes doe not appere) of his laudable
qualities. True it is, that fortune was not for al this,
so muche his enemye, that it left not some byt record
of the readinesse of his witte, as doeth declare certayne
of his writings, and setting forth the of amorous ver-
ses, wherein (although he were not in loue) yet for that
he would not consume time in vaine, til vnto p[ro]foun-
der studies fortune should haue brought him, in his
youthfull age he exercised himselfe. Whereby moste
plainly maye be comprehended, with how moche fel-
icitie he did describe his conceytes, and how moche for
Poetrie he should haue ben esteemed, if the same for the
ende therof, had of him ben exercised. Fortune hauing
therfore dep[ri]ued vs from the vse of so great a frende,
we thinke there can bee founde no other remedie,
then as muche as is possible, to seeke to enioye the me-
morie of the same, and to reapeate suche thynges as
hath been of him either wittely saied, or wisely dispu-
ted. And for as much as there is nothyng of him more
freshe, then the reasonyng, the whiche in his last daies
Signio Fabicio Collonna, in his orchard had with
him, where largely of the same gentelman were dis-
puted matters of warre, bothe wittely and prudently,
for the moste parte of Cosimo demaunded, I thought
good, for that I was p[re]sent there with certain other
of our frendes, to bring it to memorie, so that reading
thesame, the frendes of Cosimo, whiche thether came,
might renewe in their mindes, the remembraunce of
his vertue: and the other part beinge soe for their ab-
sence, might partly learne hereby many thynges p[ro]-
fitable, not onely to the life of Souldiours, but also to
ciuil mennes liues, which grauely of a moste wise mā
was disputed. Therfore I saie, that Fabicio Collon-
na retournyng out of Lombardie, where longe time
greatly to his glorie, he had serued in the warres the
catholike kyng, he determined, passyng by Florence,
to

to rest himself certain daies in the same citie, to visite the Dukes excellencie, and to see certaine gentilmien, whiche in times passe he had been acquainted withal. For whiche cause, vnto Cosimo it was thought beste to bid him into his orchard, not so muche to vse his liberalitee, as to haue occasion to talke with him at leisure, and of him to vnderstande and to learne diuers thinges, accoꝝdyng as of suche a man maie bee hoped for, semyng to haue accasion to spende a daie in reasoning of suche matters, which to his minde should best satisfie him. When Fabritio came, accoꝝdyng to his desire, and was receiued of Cosimo together, with certain of his trustie frendes, emongest whome wer Zanoby Buondelmonti, Baptiste Balla, and Luigi Alamanni, all young men loued of him, and of the very same studies moste ardent, whose good qualities, for as muche as euery daie, and at euery houre thei dooe praise them selues, we will omit. Fabritio was then accoꝝdyng to the time and place honoured, of all those honours, that thei could possible deuise: But the banquetting pleasures beyng passed, & the tabel taken vp, and al preparacion of feastinges consumed, the which are sone at an ende in sight of greate men, who to honorable studies haue their mindes set, the daie beyng longe, and the heate muche, Cosimo iudged for to content better his desire, that it wer well doen, takyng occasion to auoide the heate, to bzing him into the moste secret, and shadowell place of his garden. Where thei beyng come, and caused to sit, some vpon herbes, some in the coldest places, other vpon little seates which there was ordeined, vnder the shadow of moste high trees, Fabritio praiseth the place, to be delectable, and particularly consideryng the trees, and not knowyng some of them, he did stande musinge in his minde, whereof Cosimo beeyng a ware saied, you haue not peraduenture ben acquainted with some of these sortes of trees: But doe not maruell at it, for as muche as there bee

How Gentious
Fabritio Col-
idna and other
gentilmien bees
ing together in
a garden, entra-
red into talke
of matters of
warre.

some

The first booke.

some, that were more esteemed of the antiquitie, then they are commonly now a daies: and he tolde him the names of them, and how Barnardo his grandfather did traualle in suche kinde of plantyng: *Fabritio* replied, I thought it shuld be the same you saie, and this place, and this studie, made me to remember certaine Princes of the Kingdome of Naples, whiche of these auncient tillage and shadow doe delight. And sayng vpon this talke, and somewhat standyng in a studdie, saied moreouer, if I thought I should not offende, I woud tell my opinion, but I beleue I shall not, commonyng with friends, & to dispute of thynges, & not to condemne them. How much better they should haue doen (be it spoken without displeasure to any man) to haue sought to been like y antiquitie in thinges soft, and sharpe, not in the delicate and soft: and in those that they did in the Sunne, not in the shadowe: and to take the true and perfecte maners of y antiquitie: not those that are false and corrupted: for that when these studies pleased my Romaines, my countrie fell into ruin. Vnto which *Cosmo* answered. But to auoide the tediousnesse to reperate so many times he saied, & the other answered, there shall be onely noted the names of those that speakes, without rehering other.

Then *Cosmo* saied, you haue opened the waie of a reasoning, which I haue desired, and I praise you that you will speake withoute respecte, for that that I without respecte will aske you, and if I demaundyng, or repliing shall excuse, or accuse any, it shal not be to excuse, or accuse, but to vnderstande of you the truth.

Fabritio. And I shall be very well contented to tell you that, whiche I vnderstand of al the same that you shall aske me, the whiche if it shall be true, or no, I wil report me to your iudgemente: and I will be glad that you aske me, for that I am to learne, as well of you in askyng me, as you of me in aunswerynge you: for as muche as many times a wise demaunder, maketh

keth one to consider many thynges, and to knowe
 many other, whiche without haupng been demaun-
 ded, he should neuer have knowen. *Cosmo.* I will re-
 tourne to the same, that you said first, that my graunde-
 father and those your Princes, should haue doen more
 wisely, to haue resembled the antiquitie in hard thinges,
 then in the delicate, and I will excuse my parte:
 for that, the other I shall leaue to excuse for you: I doe
 not beleue that in his tyme was any manne, that so
 moche detested the liupng in ease, as he did, and that
 so moche was a lover of the same hardenelle of life,
 whiche you praise: not withstanding he knewe not
 how to bee able in persons, nor in those of his comen-
 to vse it, beeing borne in so corrupte a world, where
 one that would digresse from the common vse, should
 bee infamed and disdained of euery man: considering
 that if one in the hottest day of summer being naked,
 should wallowe himself vpon the Sande, or in winter
 in the moste coldest monethes vpon the snowe, as
 Diogenes did, he should be taken as a fool. If one (as
 the Spartans were wonte to doe) should nourishe his
 childre in a billage, making them to slepe in the open
 aire, to go with bare feete naked, to washe them-
 selues in the colde water for to harden them, to be able
 to abide moche paine, and for to make them to loue
 lesse life, and to feare lesse death, he should be frozen,
 and sooner taken as a wilde beest, then as a manne. If
 there were seen also one, to nourishe himself with peas-
 son and beanes, and to despise gold, as Fabius doeth,
 he should bee praised of fewe, and folloved of none: so
 that he being afraid of this present maner of liupng,
 he left chauncellors factors, and the same, that he could
 with lesse admittion suffice in the antiquitie, he did.
To Fabius. you haue excused it in this parte mooste
 strongly: and surely you saye the truthe: but I did not
 speake so moche of this harde maner of liupng, as of
 other maners more humane, and whiche haue with
 the

the life now a daies greater conformitie. The whiche
 I doe not beleue, that it hath been difficulte to bying
 to passe vnto one, who is nombred amongst Princes
 of a citee: for the prouyng whereof, I will neuer seke
 other, then the example of the Romaines. Whose liues,
 if thei wer well considered, and the orders of the same co-
 mon weale, there should therein be seen many thinges,
 not impossible to induce into a cominaltie, so that it
 had in her any good thing. *Cosmo.* What thynges are
 those, that you would induce like vnto the antiquitie.
Fabritio. To honour, and to reward vertue, not to de-
 spise pouertie, to esteeme the maners & orders of war-
 fare, to constrain the citizens to loue one an other, to
 liue without seates, to esteeme lesse the priuate, than the
 publike, and other like thinges, that easily might bee
 with this time accompanied: the which maners ar not
 difficult to bying to passe. lybe a mā shoul wel consider
 them, and entre therein by due meanes: for asmoche as
 in the same, the truth so moche appereth, that enery co-
 mō wit, mase easely perceiue it: which thing, who that
 ordeineth, both plāt trees, vnder the shadowe whereof,
 thei abide moze happie, and moze pleasantly, then vnder
 these shadowes of this goodly gardeine. *Cosmo.* I
 will not speake any thyng againste the same that you
 haue sated, but I will leaue it to bee iudged of these,
 to whom easely can iudge, and I will tourne my com-
 munication to you, that is an accusar of thei, the
 whiche in grame, and greete paynges, are not follo-
 wers of the antiquitie, thinking by this waie more
 easely to be in my entent satisfied. Wherefore, I would
 knowe of you whereof it groweth, that of the one side
 you condemne those, that in their paynges resemble
 not the antiquitie: Of the other, in the waie, whiche
 is your art, wherein you are iudged excellent, it is not
 seen, that you haue indenoured your self, to bying the
 same to any soe ende, or any thyng at all resembling
 therein the ancient maners. *Fabritio.* You are hap-
 ned

ned vpon the pointe, where I looked: so that my talke
 deserued no other question: nor I desired other: and al-
 beit that I could saue my self with an easie excuse; not
 withstanding so; my moze contentacion, and yours,
 seying that the season beareth it, I will enter in moche
 longer reasoning. Those men, whiche will enterpasse
 any thyng, ought firste with all diligence to prepare
 theim selues, to be ready and apte when occasion ser-
 ueth, to accomplishe that, which they haue determined
 to worke: and so; that when the preparaciōs are made
 craftely, they are not knowen, there cannot be accused
 any man of any negligence; if firste it be not disclosed
 by the occasion: in the which working not, is after sercn,
 either that there is not prepared so moche as suffiseth,
 or that there hath not been of any part therof thought
 vpon. And so; as moche as to me there is not come any
 occasion to be able, to shewe the preparaciōs made of
 me, to reduce the seruise of warre into his aunciet or-
 ders, if I haue not reduced it, I cannot be of you, nor of
 other blamed: I beleue this excuse should suffice so; an-
 swere to your accusemēt. *Cosmo.* It should suffice, whē
 I wer certain, that the occasion wer not come. *Fab.* But
 so; that I know, that you make doubt whether this oc-
 cation hath been cum, or no, I will largely (when you
 with patience will heare me) discourse what prepara-
 ciōs are necessary first to make, what occasion muste
 growe, what difficultie doeth let, that the preparaciōs
 help not, and why the occasion cannot come, & how these
 things at ones, which seme cōtrary endes, is most dif-
 ficill, & most easie to do. *Cosmo.* You cannot do bothe to
 me, and vnto these other, a thing moze thankfull then
 this. And if to you it shall not be tedious to speake, but
 to do it shall neuer be greuous to heare: but so; as much
 as this reasoning ought to be long, I will with your
 license take helpe of these my frendes: and they, and I
 praye you of one thyng, that is, that you will not be
 greued, if some speake with some question of impo-
 ssibility.

taunce, we interrupte you. *Fabrizio*. I am mosse well contented, that you *Cosimo* with these other younge men here, doe aske me: for that I beleue, that youthfulnes, wil make you louers of warlike thinges, and moze easie to beleue thesame, that of me shalbe saied. These other, by reason of hauyng nowe their hedde whete, and for hauyng vpon their backes their bloude congeled, parte of theim are wonte to bee enemies of warre, parte incorrectable, as those, whom beleue, that tymes, and not the naughtie maners, constrain men to liue thus: so that safely aske you all of me, and without respect: the whiche I desire, as well, for that it maie be vnto me a little ease, as also for that I shall haue pleasure, not to leaue in your mynde any doubt. I will begin at your wordes, where you saied vnto me, that in the warre, that is my arte, I had not indurrowen to byyng it to any aunciente ende: wherevpon I saie, as this beyng an arte, whereby men of no manner of age can liue honestly, it cannot bee vled for an arte, but of a common weale: or of a kyngdome: and the one and the other of these. When thei bee well or desired, will neuer consent to any their Citieins, or Subiectes, to vse it for any arte, nor neuer any good manne doeth exercise it for his particulare arte: for as moche as good he shall neuer bee iudged, whom maketh an exercise thereof, where purposing alwaies to gaine thereby, it is requisite for hym to be rauenyng, deceitfull, violente, and to haue many qualities, the whiche of necessitie maketh hym not good: nor those menne cannot, whiche vse it for an arte, as well the greate as the lesse, bee made other wise: for that this arte doeth not nourishe them in peace. Wherefore thei are constrained, either to thinke that there is no peace, or so moche to puenaille in the tyme of warre, that in peace thei maie bee able to kepe them selues: and not thei of these two thoughtes happeneth in a good man: for that in myndyng to be able to fynde hymself at all tymes

Why a good
man ought ne-
uer to vse the
exercise of ar-
mes, as his art

tymes, dose growe robberies, violence, slaughters,
whiche soche souldiours make as well to the frendes,
as to the enemies: and in myndng not to haue peace,
there groweth deceiptes, whiche the capitaines vse to
those, whiche hire them, to the entent the warre maie
continue, and yet though the peace come often, it hap-
peneth that the capitaines beyng depaured of their ex-
penses, and of their licentious liuyng, thei erecte an
anigne of aduentures, and without any pittie thei put
to sacke a prouince. Haue not you in memoze of your
affaires, how that beyng many Souldiours in Italie
without wages, bicause the warre was ended, thei as-
sembled together many companies, and went taryng
the tounes, and sackng the countrie, without beyng
able to make any remedie: Haue you not red, that the
Carthagenes souldiours, the first warre beyng ended
which thei had with the Romaines, vnder Mitho, and
Spendio, two capitaines, rebelliously constituted of
theim, made moze perillous warre to the Carthagi-
nens, then thesame whiche thei had ended with the
Romaines: In the time of our fathers, Frances Sfor-
za, to the entente to bee able to liue honourably in the
time of peace, not only beguiled the Milenars, whose
souldiour he was, but he toke from them their libertie
and became their Prince. Like vnto him hath been all
the other souldiours of Italie, whiche haue vsed war-
fare, soz their particulare arte, and albeest thei haue
not through their malignitie becomen Dukes of Mi-
lein, so moche the moze thei deserue to bee blamed: soz
that although thei haue not gotten so moch as he, thei
haue all (if their lines wer seen) sought to bying y like
thynges to passe. Sforza father of Fraunces, constrain-
ed Quene Jong, to caste her self into the armes of the
king of Aragon, hauyng in a sodain forsaken her, and
in the midst of her enemies, leste her disarmed, one-
ly to satisfie his ambition, either in taryng her, o3 in
takng from her the kyngdome. Baccio with the

The firste booke.

A discourse of
warre & peace.

verie same industrie, sought to possesse the kyngdome of Naples, and if he had not been ouerthrowen and slaine at Aquila, he had brought it to passe. Like disorders growe not of other, then of soche men as hath been, that vse the exercise of warfare, for their proper arte. Have not you a Prisoner, whiche fortifieth my reasons, whiche saith, that warre maketh Theues, and peace hangeth theim vp? For as moche as those, whiche knowe not how to liue of other exercise, and in the same finding not ense man to sustayne theim, and hauing not so moche power, to knowe how to reduce theim selues together, to make an open rebellion, they are constrained of necessitie to Robbe in the highe waies, and Justice is enforced to extinguishe theim. *Cesmo.* You haue made me to esteeme this arte of warfare almoste as nothyng, and I haue supposed it the moste excellentes, and moste honourable that hath been used: so that if you declare me it not better, I cannot remaine satisfied: For that when it is the same, that you saie, I knowe not, whereof groweth the glorie of Cesar, of Pompei, of Scipio, of Marcellus, and of so many Romaine Capitaines, whiche by fame are celebrated as Goddes. *Fabricio.* I haue not yet made an ende of disputing al thesame, that I purposed to propounde: whiche were twoo thynges, the one, that a good manne could not vse this exercise for his arte: the other, that a common weale or a kyngdome well gouerned, did neuer permitte, that their Subiectes or Citizens should vse it for an arte. Aboute the firste, I haue spoken as moche as hath comen into my mynde: there remaineth in me to speake of the seconde, where I woll come to aunswere to this your laste question, and I saie that Pompey and Cesar, and almoste all those Capitaines, whiche were at Rome, after the laste Carthageneus warre, gotte fame as valsaunt men, not as good, and those whiche liued before them, gotte glorie as valsaunts and good men;

menne: the whiche grewe, for that these tooke not the exercise of warre for their arte: and those whiche I named firste, as their arte did vse it. And so longe as the common weale liued vnspotted, neuer any noble Citizen would presume, by the meane of soche exercise, to auaille thereby in peace, breaking the lawes, spoiling the Provinces, vsurping, and plaiying the Tyrante in the countrie, and in euery maner preuailling: nor any of how lowe degree so ether they were, would goe aboute to violate the Religion, confederating them selues with priuate men, not to feare the Senate, or to followe any tyrannicall insolence, for to bee able to liue with the arte of warre in all tymes. But those whiche were Capitaines, contented with triumphe, with desire did tourne to their priuate life, and those whiche were members, would be more willing to laie a waie their weapons, then to take them, and euery manne tourned to his science, whereby they gotte their liuing: For there was neuer any, that would hope with praise, and with this arte, to be able to finde them selues. Of this there maie be made concerning Citeizens, mooste euident coniecture, by the ensample of Regolo Attillio, who beyng Captain of the Romaine armies in Africa, and hauing as it were ouercome the Carthegenens, he required of the Senate, licence to retourne home, to kepe his possessions, and told them, that they were marde of his husbandmen. Whereby it is more clere then the Sunne, that if the same manne had vsed the warre as his arte, and by meanes thereof, had purposed to haue made it profitable vnto him, hauing in praise so many Provinces, he would not haue asked license, to retourne to kepe his felde: for as moche as euery day he might other wise, haue gottē moche more, then the value of al those possessions: but because these good men, and soche as vse not the warre for their arte, will not take of the same any thing then labour, perilles, and glorie, when they

The firste booke.

are sufficiently glorious, thei desire to returne home, and to liue of their owne science. Concernyng menne of lowe degree, and common souldiours, to p[ro]oue that thei kepte the verie same order, it doeth appeare that euery one willingly absented them selues from soche exercise, and when thei serued not in the warre, thei would haue desired to serue, and when thei did serue, thei would haue desired leaue not to haue serued: whiche is wel knowne th[ro]ugh many insamples, and in especially seeyng how emonge the firste p[ri]uileges, whiche the Romaine people gaue to their Citezens was, that thei should not be constrained against their willes, to serue in the warres. Therefore, Rome so long as it was well gouerned, whiche was vntill the commyng of Gracchus, it had not any souldiour that would take this exercise for an arte, and therefore it had fewe naughtie, and those fewe were severely punished. When a citie well gouerned, ought to desire, that this studie of warre, be vsed in tyme of peace for exercise, and in the tyme of warre, for necessitie and for glorie: and to suffer onely the common weale to vse it for an arte, as Rome did; and what so euer Citezen, that hath in soche exercise other ends, is not good; & what so euer citie is gouerned other wise, is not well ordered. *Cosmo.* I remain contented enough and satisfied of the same, whiche hether to you haue told, and this conclusion pleaseth me verie wel whiche you haue made, and as muche as is looked for touching a common welth; I beleue that it is true, but concerning kinges, I can not tell nowe, for that I would beleeue that a kinge would haue about him, whome particularly should takee suche exercise for his arte. *Fabius.* A kingdome well ordered ought mooste of all to auoide the like kinde of men, for only thei, are the destruction of their king, and all together ministers of tyranny, and alledge me not to the contrarie ante presente kingdome, for that I will denie you all those to be kingdomes well ordered,

red, bicause the kingdomes whiche haue good order,
 giue not their absolute Empire vnto their king, sa-
 uing in the armies, so; as much as in this place only,
 a quicke deliberation is necessarie, & so; this cause a
 principall power ought to be made. In y^e other affai-
 res, he ought not to doe any thing without counsell,
 & those are to be feared, which counsell him, leasse he
 haue some aboute him which in time of peace desireth
 to haue warre, bicause they are not able without the
 same to liue, but in this, I wilbe a little moze large:
 neither to seke a kingdome altogether good, but like
 vnto those whiche be nowe a daies, where also of a
 king those ought to be feared, whiche take the warre
 so; theire art, so; that the strength of armies without
 any doubt are the soote menne: so that if a king take
 not order in suche wise, that his men in time of peace
 may be cōtent to returne home, & to liue of their owne
 trades, it will follow of necessitie, that he ruinate: so;
 that there is not found moze perillous mē, then those,
 whiche make the warre as their arte: bicause in such
 case, a king is inforced either alwaies to make warre,
 o; to paie them alwaies, o; else to bee in perill, that
 they take noe stō him his kingdome. To make warre
 alwaies, it is not possible: to paie them alwaies it can
 not be seene that of necessitie, he runneth in perill to lese
 the state. The Romaines (as I haue saide) so long as
 they were wise and good, would neuer permitte, that
 their Citizens should take this exercise so; theire arte,
 although they were able to harrie them therein al-
 waies, so; that that alwaies they made warre: but to
 auoide the same hurte, whiche this continuall exercise
 might doe them, sepng the time did not varie, they
 changed the men, and from time to time toke such or-
 der with their legions, that in xij. yeres alwaies, they
 renewed them: and so thei had their mē in the floure
 of their age, that is from xij. to xxij. yeres, in which
 time the legges, the handes, and the pes answer the

The firste booke.

one the other; nor thei carried not till there strengthe should decaye; and there naghtines increase, as it did after in the corrupted times. For as muche as Octavian firste, and after Tiberius, minding moze there proper power, then the publicke profite, began to undermine the Romaine people, to be able easely to commaunde them, & to kepe continually those same armies on the frontieries of the Empire: and because also they iudged those, not sufficient to kepe byrdeled the people and Romaine Senate, they ordeined an armie called *Prætoriana*, which laye harde by the walles of Rome, and was as a rocke on the backe of the same Citie. And so; as much as then thei began frely to permitte, that suche men as were apointed in suche exercises, should vse the service of warre for their arte, straight waie the insolence of theim grewe, that they became fearful vnto the Senate, and hurtfull to the Emperour, whereby ensued suche harme, that manie were slaine thoough there insolencie: so; that they gaue, and toke awaie the Empire, to whome they thought good. And some while it hapned, that in one self time there were manie Emperours, created of diuers armies, of whiche thinges proceeded first the deuision of the Empire, and at laste the ruine of the same. Wherefore kings ought, if thei will liue safely, to haue there souldiours made of me, who when it is time to make warre, willingly for his loue will go to the same, and when the peace cometh after, moze willingly will returne home. Whiche alwaies wilbe, when thei shall be men that know how to liue of other arte then this: and so they ought to desire, peace beyng come, that there Princes doo tourne to gouerne their people, the gentlemen to the tending of there possessions, and the comon souldiours to their particular arte, and euerie one of these, to make warre to haue peace, and not to seke to trouble the peace, to haue warre. *Cosmo*. True. In this reasonyng of yours, I thinke to bee well considered

sidered, notwithstanding beyng almost contrarie to
 that, whiche till nowe I haue thought, my minde as
 yet doeth not rest purged of all doubt, so as muche
 as I see manie Lordes and gentlemen, to finde them
 selues in time of peace, though the studies of warre,
 as your matches bee, who haue prouision of there
 princes, and of the cominaltie. I see also, almost al the
 gentlemen of armes, remaine with their prouision, I
 see manie souldiours lie in garison of Cities and for-
 tresses, so that my thynkes, that there is place in time
 of peace, so euerie one. *Fabritio.* I doe not beleue that
 you beleue this, that in time of peace euerie man may
 haue place, bicause, put case that there coulde not be
 brought other reason, the small number, that all they
 make, whiche remaine in the places alledged of you,
 would answer you. What proportion haue the soul-
 diours, whiche are requiset to bee in the warre with
 those, whiche in the peace are occupied? For as much
 as the fortresses, and the cities that be warded in time
 of peace, in the warre are warded muche moze, vnto
 whome are ioynd the souldiours, whiche kepe in the
 felde, whiche are a great number, all whiche in the
 peace be putte a waite. And concerning the garde of
 states, whiche are a small number, Pope Iulij, and
 you haue shewed to euerie man, how muche are to be
 feared those, who will not learne to exercise any other
 art, then the warre, and you haue so there insolence,
 depriued them from your garde, and haue placed there
 in swifers, as men borne & brought by vnder lawes,
 and chosen of the cominaltie, according to the true e-
 lection: so that saie no moze, that in peace is place for
 euerie man. Concerning men at armes, the al reman-
 ning in peace with their wages, maketh this resolu-
 tion to seme moze difficulte: notwithstanding who
 considereth well all, shall finde the answer easie, bi-
 cause this manner of keeping men of armes, is a cor-
 rupted manner and not good, the occasion is, so that
 they

they be men, who make thereof an arte, and of them their should grow euery daie a thousande inconueniencies in the states, where they should be, if they were accompanied of sufficient company: but being selue, and not able by them selues to make an armie, they cannot often doe suche greuous hurtes, neuertheless they haue done oftentimes: as I haue said of Frances, and of Scorza his father, and of Braccio of Perugia: so that this vse of keeping men of armes, I doe not allowe, for it is a corrupte maner, & it may make great inconueniencies. *Cosmo.* Woulde you liue without them: or keeping them, how would you kepe them?

Fabritio. By waie of ordinance, not like to those of the king of France: for as muche as they be perillous, and insolent like vnto ours, but I would kepe the like vnto those of the auncient Romaines, whom created their chualtry of their owne subiectes, & in peace time, they sente the home vnto their houses, to liue of their owne trades, as moze largely before this reasoning ende, I shal dispute. So that if now this part of an armie, can liue in such exercise, as wel when it is peace, it groweth of the corrupt order. Concerning the provisions, which are reserved to me, & to other capitaines, I saie vnto you, that this likewise is an order moze corrupted: for as much as a wise comon weale, ought not to giue such stipēdes to any, but rather they ought to be for Capitaines in the warre, their Citizens, and in time of peace to will, that they returne to their occupations. Likewise also, a wise king either ought not to giue to suche, or giuing any, the occasion ought to be either for rewarde of some worthy dede, or else for the desire to kepe suche a kinde of man, as well in peace as in warre. And because you alledged me, I will make ensample vpon my self, & saie that I neuer vsed the warre as an arte, for as muche as my arte, is to gouerne my subiectes, and to defende them, & to be able to defende them, to loue peace, & to know how to make

make warre, and my kinge not so muche to rewarde
and esteeme me, so; my knowledge in the warre, as
so; the knowledge that I haue to coucel him in peace.
Then a king ought not to desire to haue about him,
any that is not of this condition if he be wise, and prou-
dently minde to gouerne: so; that, that if he shal haue
about him either to muche louers of peace, or to much
louers of warre, they shal make him to erre. I can-
not in this my firste reasoning, and according to my
purpose saie more, and when this suffiseth you not, it
is mete, you seeke of them that may satisfie you better.
You maie now verie well vnderstand, how difficulte
it is to bringe in by the auncient maners in the pre-
sente warres, and what preparations are mete so; a
wise man to make, and what occasions ought to be lo-
ked so;, to be able to execute it. But by & by, you shal
know these things better, if this reasoning make you
not erre, considering what so ever partes of the aunc-
ient orders hath ben, to the maners nowe presente.

Cosimo. If we desired at the first to here your reason
of these things, truly thesame whiche hetherto you
haue spoken, hath doubled our desire: wherefore we
thanke you so; y we haue hard, & the rest, we craue of
you to here *Fabritio.* Saying that it is so your pleasure,
I will begin to intreate of this matter from the be-
ginning, to the intent it maye be better vnderstode,
being able by thesame meane, more largely to declare
it. The ende of him that wil make warre, is to be able
to fight with enery enemy in the fildes, & to be able to
ouercome an armie. To purpose to doe this, it is conue-
nient to ordeine an host. To ordeine an host, they
must be found menne, armed, ordered, and as well in
the small, as in the great orders exercised; to knowe
howe to kepe arais, and to incampe, so that after bring-
ing them vnto the enemy, either standing or mar-
ching, they maie know how to behaue theselues val-
iantly. In this thing consisteth all the industrie of the

A kinge that
hath about him
any that are to
much louers of
warre, or to
much louers of
peace shal cause
him to erre.

The firste booke

warre on the lande, whiche is the most necessarie, and the most honozablest, so; he that can wel order a felde against the enemye, the other faultes that he should make in the affaires of warre, wilbe bozne with: but he that lacketh this knowledge, although that in other particulars he be verie good, he shal neuer bring a warre to hono: so; as muche as a felde that thou winnest, doeth cancell all other thy euill actes: so like wise lesing it, all thinges well done of thee besoze, remaine vaine. Therfoze, beyng necessarie first to finde the menne, it is requiset to come to the choise of them. They whiche vnto the warre haue giuen rule, will that the menne be chosen out of temperate countries, to the intente they may haue hardines, and pzudence, so; as muche as the hote countrey, byedes pzudente men and not hardy, the colde, hardy, and not pzudente. This rule is good to be geue, to one that were prince of all the world, bicause it is lawfull so; him to choose men out of those places, whiche he shal thinke best. But minding to giue a rule, that euery one may vse, it is mete to declare, that euerie common weale, and euery kingdome, ought to choose their souldiours out of their owne countrie, whether it be hote, colde, or temperate: so; that it is seene by olde ensamples, how that in euery coutrie with exercise, their is made good souldiours: bicause where nature lacketh, the industry supplieth, the which in this case is wo; the moze, then nature, and taking them in other places, you shal not haue of the choise, so; choise is as much to saie, as the best of a prouince, & to haue power to chuse those that will not, as well as those that wil serue. Wherfoze, you muste take your choise in those places, that are subiecte vnto you, so; that you cannot take whome you liste, in the countries that are not yours, but you muste take suche as will goe with you.

Cosimo. Yet there maie bee of those, that will come, taken and leste, and therfoze, they maie be called chosen.

Order of what
Countrie is best
to chuse Souldiours
to make
a good electio.

sen. *Fabricio.* You saie the truthe in a certaine maner, but consider the faultes, whiche soche a chosen manne hath in himselfe, so that also many times it hapneth, that he is not a chosen manne. For those that are not thy subiectes, and whiche willyngly doe serue, are not of the beste, but rather of the worst of a Prouince, so as moche as if any be sclanderous, idell, unruly, without Religion, sugetiue from the rule of their fathers, blasphemours, Disse plaiers, in euery condicion euill brought vp, bee those, whiche will serue, whose customes cannot be moze contrarie, to a true and good seruise: Albeit, when there bee offered vnto you, so many of soche men, as come to aboue the nomber, that you haue appoynted, you maie chuse them: but the matter beyng naught, the choise is not possible to be good: also, many times it chaunceth, that thei be not so many, as will make vp the nomber, whereof you haue nede, so that beyng constrained to take them al, it commeth to passe, that thei cannot then bee called chosen men, but hired Souldiours. With this disorder the armies of Italie, are made now a daies, and in other places, except in Almanie, bicause there thei doe not hire any by commaundemente of the Prince, but accorpyng to the will of them, that are disposed to serue. Then consider now, what maners of those aunciente armies, maie bee brought into an armie of men, put togethet by like waies. *Cosmo.* What waie ought to bee vsed then? *Fabricio.* The same waie that I sated, to chuse them of their owne subiectes, and with the authoritie of the Prince. *Cosmo.* In the chosen, shall there bee likewise brought in any auncient facion? *Fabricio.* You know well enough that ye: when he that should commaunde them, were their Prince, or ordinarie lord, whether he were made chief, or as a Citeiein, and for the same tyme Capitaine, beyng a common weale, or therwise it is harde to make any thyng good.

Cosmo. Why? *Fabricio.* I will tell you a name: For
this

The firste booke

Whether it be
better to take
menne oute of
countrie or out
of the countrie
so ferre.

Of what age
Souldiours
ought to bee
chosen.

this time I will that this suffice you, that it cannot
be wrought well by other waie. *Cosimo*. Having then
to make this choyle of men in their owne countries,
whether iudge you that it be better to take them oute
of the citie, or out of the countrie? *Fabricio*. Those that
haue written of such matters, doe all agree, that it is
best to chuse the out of the countrie, being men accus-
tomed to no ease, nurished in labours, vsed to stonde in
the sunne, to sie the shadow, knowing how to occupy
the spade, to make a ditch, to carrie a burden, & to bee
without any deceite, & without malitiousnes. But in
this parte my opiniõ should be, that being two sortes
of souldiours, on foote, & on horsebacke, that those on
foote, should be chosen out of the countrie, and those
on horseback, oute of the Cities. *Cosimo*. Of what age
would you choose them? *Fabricio*. I would take them,
when I had to make a newe armie, from xviij. to xl.
yeres: when it were made alredy, and I had to resioze
them, of xviij. alwaies. *Cosimo*. I doe not vnderstonde
well this distinction. *Fabricio*. I shall tell you: when I
should ordaine an hooſte to make warre, where were
no hooſte alredy, it should be necessarie to chuse all
those me, which were most fitte & apte for the warre,
so that they were of seruisable age, that I might bee
able to instructe them, as by me shalbe declared: but
when I would make my choise of menne in places,
where a power were alredy prepared, for supplying of
thesame, I would take them of xviij. yeres: so; as much
as the other of moze age, be alredy chosen & appointed.

Cosimo. When would you prepare a power like to
those whiche is in our countrie? *Fabricio*. Ve truly, it
is so that I would arme them, Captaine them, exer-
cise and order them in a maner, whiche I cannot tell,
if you haue ordered them so. *Cosimo*. When do you praise
the keeping of order?

Fabricio. Wherefore would you that I should dis-
praise it? *Cosimo*. Because many wise menne haue al-
waies

waies blamed it.

Fabricio. You speake against all reason, to saie that a wise man blameth order, he maie bee well thought wise, and be nothyng so.

Cosimo. The naughtie prose, which it hath allwaies, maketh vs to haue soche opinion thereof.

Fabricio. Take hede it be not your fault, and not the keeping of order, the whiche you shall knowe, befoze this reasonyng be ended.

Cosimo. You shall doe a thyng mosse thankfull, yet I will saie concernyng thesame, that thei accuse it, to the entente you maie the better iustifie it. Thei saie thus, either it is vnprofitable, and we trustyng on the same, shall make vs to lese our state, or it shall be ver-
teous, and by thesame meane, he that gouerneth may easely depytue vs thereof. Thei alledge the Romaines, who by meane of their owne powers, losse their libertie. Thei alledge the Venicians, & the Frenche king, whiche Venicians, bicause thei will not be constrained, to obeie one of their owne Citezeins, vse the power of straungers: and the Frenche kyng hath dis-
armed his people, to be able moze easely to commaunde them, but thei whiche like not the ordinaunces, feare moche moze the vnprofitablenesse, that thei suppose maie insue thereby, then any thyng els: the one cause whiche thei allege is, bicause thei are vnerperte: The other, so; that thei haue to serue par force: so; as moche as thei saie, that the aged bee not so disciplinable, no; apte to learne the seate of armes, and that by force, is doen neuer any thyng good.

Fabricio. All these reasons that you haue rehearsed, be of men, whiche knoweth the thyng full little, as I shall plainly declare. And firste, concernyng the vn-
profitablenesse, I tell you, that there is no seruice vled in any countrie moze profitable, then the seruice by the Subiectes of thesame, no; thesame seruice cannot bee prepared, but in this maner; and so; that this ne-

The firste booke.

By what mea-
nes souldiours
bee made bolde
and expecte.

beth not to be disputed of, I will not lese moche tyme; bicause al the samples of auncient hystories, make for my purpose, and for that thei alledge the lacke of experience, & to vse constraint: I saie how it is true, that the lacke of experience, causeth lacke of courage, and constraint, maketh euill contentacion: but courage, and experience thei are made to gette, with the maner of armyng theim, exercisynge, and orderynge theim, as in pceedynge of this reasonynge, you shall heare. But concernynge constraint, you ought to vnderstande, that the menne, whiche are conducted to warfare, by commaundement of their prince, thei ought to come, neither altogether forced, nor altogether willyngly, for as moche as to moche willynghesse, would make thinconueniencies, where I told afoze, that he should not be a chosen manne, and those would be fewe that would go: and so to moche constraint, will bring forth naughtie effectes. Wherefoze, a meane ought to be taken, where is not all constraint, nor all willingnesse: but beynge drawen of a respecte, that thei haue towarde their prince, where thei feare more the displeasure of the same, then the present paine: and alwaies it shall happen to be a constraint, in maner mingled with willingnesse, that there cannot growe soche euill contentacion, that it make euill effectes. Yet I saie not for all this, that it cannot bee overcome, for that full many tymes, were overcome the Romaine armies, and the armie of Aniball was overcome, so that it is seen, that an armie cannot be obtained so sure, that it cannot be ouerthrowen. Wherefoze, these your wise men, ought not to measure this vnprofitablenesse, for hauyng losse ones, but to beleue, that like as thei lese, so thei make winne, and remeadie the occasion of the losse: and whē thei shall seeke this, thei shall finde, that it hath not been through faulte of the waie, but of the order, whiche had not his perfection, and as I haue said, thei ought to prouide, not with blamyng the order,

der, but with redressing it, the whiche how it ought to be doen, you shall vnderstande, from point to point. Concernyng the doubte, lesse soche ordinaunces, take not from thee thy state, by meane of one, whiche is made hedde therof, I answered, that the armure on the backs of citezeins, or subiectes, giuen by the disposicion of order and lawe, did neuer harme, but rather alwaies it doeth good, and mainteineth the citee, moche longer in suretie, throught helpe of this armure, then without. Rome continued free. CCC. yeres, and was armed. Sparta. vij. C. Many other citees haue been disarmed, and haue remained free, lesse then. xl. For as moche as citees haue nede of defence, and whet they haue no defence of their owne, they hire straungers, and the straungers defence, shall hurte moche sooner the comon weale, then their owne: because they be moche easier to be corrupted, and a citezein that becometh mightie, maie moche sooner vsurpe, and moze safely bypnyng his purpose to passe, where the people bee disarmed, that he seeketh to oppresse: besides this, a citee ought to feare a greate deale moze, twoo enemies then one. The same citee that vsyth straungers power, feareth at one instant the straunger, whiche it hireth, and the Citezein: and whether this feare ought to be, remember the same, whiche I rehearsed a litle a fore of Frances Hozza. That citee, whiche vsyth her own proper power, feareth no man, other then onely her owne Citezein. But for all the reasons that maie be sayed, this shall serue me, that neuer any ordeined any common weale, or kyngdome, that would not thinke, that they them selues, that inhabyte the same, should with their swordes defende it.

A Citee that vsyth the seruise of straungers, feareth at one instante the straungers, whiche it hireth and the citezeins of the same.

And if the Venicians had been so wise in this, as in all their other orders, they should haue made a new Monarchie in the world, whom so moche the moze deserue blame, haupng been armed of their first giuer of lawes: for haupng no dominion on the lande, they wer

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armed

The firste booke.

armed on the sea, where thei made their warre vertuously, and with weapons in their handes, increased their countrey. But when thei were giuen, to make warre on the lande, to defende Alicenja, where thei ought to haue sent one of their citezens, to haue fought on the lande, thei hired for their capitaine, the Marques of Mantua: this was the same foolish act, whiche cut of their legges, from climyng into heauen, and from enlargyng their dominion: and if thei did it, bicause thei beleued, that as thei knewe, how to make warre on the sea, so thei mistrusted theim selues, to make it on the lande, it was a mistruste not wise: for as moche as moze easely, a capitaine of the sea, whiche is vsed to fight with the windes, with the water, and with me, shall become a Capitaine of the lande, where he shall fight with men onely, then a capitaine of the lande, to become a capitaine of the sea. The Romaines knowyng how to fight on the lande, and on the sea, commyng to warre, with the Carthaginens, whiche were mighty on the sea, hired not Grekes, or Spaniardes, accustomed to the sea, but thei committed the same care, to their Citezeins, whiche thei sent on the land, and thei overcame. If thei did it, for that one of their citezeins should not become a tiraunt, it was a feare smally considered: for that besides the same reasons, whiche to this purpose, a little afoze I haue rehearsed, if a Citezein with the powers on the sea, was neuer made a tiraunt in a citee standyng in the sea, so moche the lesse he should haue been able to accomplishe this with the powers of the lande: whereby thei ought to se that the weapons in the handes of their Citezeins, could not make tirautes: but the naughtie orders of the gouernement, whiche maketh tirannie in a citee, & thei haupng good gouernement, thei nede not to feare their owne weapons: thei toke therefore an vnwise wate, the whiche hath been occasion, to take from the moche glorie, and moche felicitie. Concernyng the errours, whiche

whiche the kyng of Fraunce committeth not keepyng instructed his people in the warre, the whiche those your wise men alledge for ensample, there is no man, (his particulare passions laicd aside) that doeth not iudge this fault, to be in the same kyngdome, and this negligence onely to make hym weake. But I haue made to greates a digression, and peraduenture am come out of my purpose, albeit, I haue doen it to answer you, and to shewe you, that in no countrie, there can bee made sure foundation, for defence in other powers but of their owne subiectes: and their own power, cannot be prepared other wise, then by waie of an ordinaunce, nor by other waie, to induce the facion of an armie in any place, nor by other meane to ordein an instruction of warfare. If you haue red the orders, whiche those first kynges made in Rome, and inespacially *Servio Tullio*, you shall finde that the orders of the *Classe* is no other, then an ordinaunce, to be able at a sodaine, to byng together an armie, for defence of the same citee. But let vs retourne to our choise, I saie againe, that hauyng to renewe an olde order, I would take them of .xvij. hauyng to make a newe armie, I would take them of all ages, betwene .xvij. and xl. to be able to warre straight waie.

Cosmo. Would you make any difference, of what science you would chuse them?

Fabritio. The authours, which haue written of the arte of warre, make difference, for that thei will not, that there bee taken fowlers, Fishers, Cookes, baudes, nor none that vse any science of voluptuousnesse. But thei will, that there bee taken Blowmen, Ferrars, Smithes, Carpenters, Buchars, Hunters, and soche like: but I would make little difference, through coniecture of the science, concernyng the goodnesse of the man, not withstanding, in as moche as to be able with more profite to vse theim, I would make difference, and for this cause, the countie men, which are

Of what science
soldiours
ought to be
chosen.

used to till the ground, are more profitable then any other. Pert to whom be Smithes, Carpentars, Ferrars, Masons, wherof it is profitable to haue enough: so; that their occupations, serue well in many thynges: beyng a thyng verie good to haue a souldiour, of whom maie be had double seruise.

Cosmo. Wherby doe thei knowe those, that be, or are not sufficient to serue.

Fabritio. I will speake of the maner of chusing a new ordinaunce, to make an armie after, so; that, parte of this matter, doeth come also to be reasoned of, in the electio, which should be made so; the replenishing, or restoring of an old ordinaunce. I saie therfore, that the goodnesse of one, whiche thou muste chuse so; a souldiour, is knowen either by experience, thozough meane of some of his worthy doynges, or by coniecture. The prooue of vertue, cannot be founde in men whiche are chosen of newe; and whiche neuer alsoe haue ben chosen, and of these are founde either selue or none, in the ordinaunce that of newe is ordeined. It is necessarie therfore, lackyng this experience, to runne to the coniecture, whiche is taken by the yeres, by the occupation, and by the personage: of those two first, hath been reasoned, there remaineth to speake of the thirde. And therfore, I saie how some haue willed, that the souldiour bee greete, emongest whō was Pirrus. Some other haue chosen theim onely, by the lustinesse of the body, as Cesar did: whiche lustinesse of body and mynde, is coniectured by the composition of the members, and of the grace of the countenance: and therfore, these that write saie, that thei would haue the eyes lively and cherefull; the necke full of sinowes, the breauste large, the armes full of muscull, the fingers long, little beallse, the flankes rounde, the legges and feete brye: whiche partes are wont alwayes to make a manne nimble and strong, whiche are twoo thynges, that in a souldiour are sought aboute at other.

How to chosse
a souldiour.

other. Regarde ought to bee had aboue all thynges, to his customes, and that in hym bee honestie, and shame: otherwise, there shall bee chosen an instrumente of mischief, and a beginning of corruption: for that lette no manne beleue that in the dishoneste educacion, and filthy minde, there maie take any vertue, whiche is in any parte laudable. And I thinke it not superfluous, but rather I beleue it to bee necessarie, to the entente you maie the better vnderstande, the importaunce of this chosen, to tell you the maner, that the Romaine Consuls, in the beginning of their rule, obserued in the chosing of their Romain legions: in the whiche choise of men, bicause the same legions were mingled with old souldiours and newe, considering the continuall warre thei kepte, thei might in their choise procede, with the experince of the old, and with the coniecture of the newe: and this ought to be noted, that these men be chosen, either to serue incontinently, or to exercise theim incontinently, and after to serue when nede should require. But my intencion is to shew you, how an armie maie be prepared in the countrie, where there is no warlike discipline: in which countrie, chosen men cannot be had, to vse the straight waie, but there, where the custome is to leuie armies, and by meane of the Prince, thei maie then well bee had, as the Romaines obserued, and as is obserued at this daie among the Swisers: bicause in these chosen, though there be many newe menne, there be also so many of the other olde souldiours, accustomed to serue in the warlike orders, where the newe mingled together with the olde, make a bodie vnited and good, notwithstanding, that thei after, beginning the Raciones of ordinarie souldiours, had appoynated ouer the newe souldiours, whiche were called *troni*, a maister to exercise theim, as appeareth in the life of *Maximo* the Emperour. The whiche thyng, while Rome was free, not onely in the armies, but in the cities

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eltee was ordeined: and the exercises of warre, beyng accustomed in the same, where the yong men did exercise, there grew, that beyng chosen after to goe into warre, thei were so bled in the sained exercise of warfare, that thei could easely worke in the true: but those Emperours hauing after put doune these exercises, thei wer constrained to vse the waies, that I haue shewed you. Therefore, compng to the maner of the chosen Romain, I saie that after the Romain Consulles (to who was appointed the charge of the warre) had taken the rule, myndyng to ordeine their armes, soz that it was the custome, that either of the should haue twoo Legions of Romaine menne, whiche was the strength of their armes, thei created. xxiij. Tribunes of warre, and thei appointed sixe soz euery Legion, who did the same office, whiche those doe now a daies, that we call Constables: thei made after to come together, all the Romain men apte to beare weapons, and thei put the Tribunes of euery Legion, separte the one from the other. Afterwarde, by lot thei drew the Tribes, of whiche thei had firste to make the chosen, and of the same Tribe thei chose sower of the best, of whiche was chosen one of the Tribunes, of the first Legion, and of the other thre was chosen, one of the Tribunes of the second Legio, of the other two there was chosen one of the Tribunes of the third, and the same last fell to the sowerth Legion. After these. liij, thei chose other sower, of which, first one was chosen of the Tribunes of the seconde Legion, the seconde of those of the thirde, the thirde of those of the sowerth, the sowerth remained to the first. After, thei chose other sower, the first chose the thirde, the second the sowerth, the thirde the fift, the sowerth remained to the seconde: and thus thei varied successiuelly, this maner of chosyng, so that the election came to be equal, and the Legions wer gathered together: and as afoze we saied, this choise might bee made to vse straighte waies

waile, so that thei made them of men, of whom a good parte were experienced in the verie warfare in deede, and all in the samed exercised, & thei might make this choise by coniecture, and by experience. But where a power must be ordeined of newe, and so this to chuse them out of hande, this chosen cannot be made, saving by coniecture, whiche is taken by considering their adges and their likeliness.

Cosmo. I beleue all to be true, as muche as of your hath been spoke: but before you procede to other reasoning, I woll aske of you one thing, which you haue made me to remember: saying that the chosen, that is to be made where men were not used to warre, ought to be made by coniecture: so as muche as I haue heard some men, in many places dispasse our ordinaunce, and in especially concerning the number, so that many saye, that there ought to bee taken lesse number, whereof is gotten this profite, that thei shall be better and better chosen, and men shal not be so moche diseased, so that there maie bee giuen them some rewarde, whereby thei maie bee more contented, and better be commended, whereof I would vnderstande in this parte your opinion, and whether you loue better the greates number, then the little, and what waile you would take to chuse them in the one, and in the other number.

Erasmus. Without doubt it is better, and more necessary, the great number, then the little: but to speake more plainly, where there cannot be ordeined a great number of men, there cannot be ordeined a perfect ordinaunce: and I woll easily confute all the reasons of them propounded. I saie therefore firste, that the lesse nuber where is many people, as is for ensample, Tuscane, maketh not that you haue better, nor that the chosen be more excellent, so that myndyng in chosing the menne, so iudge them by experience, there shall be founde in the same countre moste selue, whom experi-

since should make pꝛouable, bothe foꝛ that fewe hath been in warre, as also foꝛ that of those, mooste fewe haue made triall, whereby they might deserue to bee chosen befoꝛe the other: so that he whiche ought in like places to chuse, it is mete he leaue a parte the experience, and take the by coniecture. When being brought likewise into soche necessitie, I would vnderstande, if there come befoꝛe me twentie young men of good stature, with what rule I ought to take, oꝛ to leaue any: where without doubte, I beleue that euery man will confesse, howe it is lesse error to take them al, to arme theim and exercise theim, being not able to knowe, whiche of theim is beste, and to reserue to make after moꝛe certayne chosen, when in pꝛactising theim with exercise, there shall be known those of moꝛe spirite, and of moꝛe life: which considered, the chusing in this case is fewe, to haue them better, is altogether naught.

Concerning diseasing lesse the countrey, and men, I saie that the ordinaunce, either euill oꝛ little that it bee, causeth not any disease, foꝛ that this order doeth not take menne from any of their businesse, it bindeth them not, that they cannot go to doe any of their affaires: foꝛ that it bindeth them onely in the idell daies, to assemble together, to exercise them, the whiche thyng doeth not hurt, neither to the countrey, noꝛ to the men, but rather to yong men, it shall bying delite: foꝛ that where vnto on the holy daies, they stande idell in idling houses, they will go foꝛ pleasure to those exercises, so that the handling of weapons, as it is a goodly spectacle, so vnto yong men it is pleasant. Concerning to be able to paye the seldome number, and foꝛ this to kepe theim moꝛe obedient, and moꝛe contented, I answere, howe there cannot be made an ordinaunce of so fewe, whiche maye be in maner continually payed, where the same payment of theirs maye satisfie them. As foꝛ ensample, if there were ordeined a power of vi. thousande men, so to paye them after soche sort, that

it might be thought sufficient, to content them; it shall
 bee convenient to give them at least, ten thousande
 crownes the moneth: first, this number of men are not
 able to make an armie, this pale is intollerable to a
 state, and of the other side, it is not sufficient to kepe
 men contented, and bounde to be able to serve so all ti-
 mes: so that in doing this, it should be spent much,
 and a small power kept, which shall not be sufficient
 to defend thee, or to doe any enterprise of thine: if thou
 shouldst give them more, or shouldst take more, so
 moche more impossibilitie it should be, for to paye
 them: if thou shouldst give them lesse, or shouldst take
 lesse, so moche the lesse contentation thou shalt have,
 or so moche the lesse profite thou shalt bring thee: What
 for, those that reason of making an ordinance, and
 whilst they tary at home to paye them, their reason is
 a thing either impossible, or unpossurable, but it is ne-
 cessarie to paye them, when they are taken up to be led
 to the warre: albeit, though soche a way should be, some
 what disease those, in time of peace, that are appointe-
 ted in the same, which if it be not done, there is for recom-
 pence all those benefites, which a power bringeth,
 that is, obedience in a countrey: for that without the
 same, there is nothing sure: I conclude, that he that
 will have the little number, to be able to paye them, or
 for any of the other causes alleged of you, doeth not
 understande, for that also it maketh for my opinion,
 that every number shall diminish in thy handes,
 through infinite impediments, which men have so
 that the little number shall come to nothing: again
 having the ordinance great, thou maist at thy plea-
 sure be served of many, besides this, it must serve thee
 in dede, and in reputation, and alwaies the great nu-
 ber shall give thee mooste reputation. Whereover, ma-
 king the ordinance to kepe menne exercised, if thou
 appointe a fewe number of men in many countreies,
 the handes of men bee so farre a sonder, the one from
 C. ii. the

the other, that thou canst not without their moſte gre-
uous loſſe, gather them together to exerciſe them, and
without this exerciſe, the ordinance is unprofitable,
as hereafter ſhall be declared. *ſecond opinion* It ſuffiſeth upon this my demaunde, that
whiche you have ſaid: but I deſire now; that you re-
place me an other doubt. What ſaie, that ſoche a mul-
titude of armed men, will make confuſion, diſſenſion
and diſorder in the countrey where they are. *ſecond opinion*
This is an other vaine opinion, the cauſe
whereof, I ſhall tell you: ſoche as are ordeined to ſerue
in the warres, make cauſe diſorder in two maners;
either betwene themſelves, or againſt other, whiche
things moſte eaſily may be withſtoode, where the or-
der of it ſelf, ſhould not withſtande it: ſo that con-
cerning the diſcord among themſelves; this order tak-
eth it away, and doeth not vnderſtande it, ſo that in o-
dering them, you giue them armours and capitaines.
If the countrey where you ordeine them, be ſo vniuersall
for the warre, that there are not armours among the
men of the ſame, and that they be ſo vniuersall, that they
have no hatreds, this order maketh the ſame moche feare-
ſer againſt the ſtraunger, but it maketh them not any
thing the more diſunited, ſo that men be ſo ordered,
ſeare the lawe being armed, as well as unarmed, nor
they can neuer alter, if the capitaines, whiche you giue
them, cauſe not the alteration, and the waie to make
this, ſhall be tolde now: but if the countrey where you
ordeine them, be ſwarlike and diſunited, this order on-
ly ſhall be occaſion to hurther them: becauſe this order gi-
ueth them armours profitable for the warre, and hea-
den, extinguishers of diſſenſion: where their owne
armours be unprofitable for the warres, and their
hatreds nourishers of diſcord. If for that ſome as any
in the ſame countrey is offended, hereſorteth by and
by to his capitaine to make complaint, whoſe to main-
tain his reputacion, comforteth hym to reuſſingement

not to peace. To the contrary doeth the publike hebd,
so that by this meanes, the occasion of discorde is taken
awaye, and the occasion of vniion is prepared, and the
prouinces vnted and effeminated, gette vtilitie, and
maintain vniion: the disvnted and discencious, doe a-
gree, and the same their fearnesse, which is wont dis-
ordinate to worke, is tourned into publike vtilitie.
To munde to haue them, to doe no hurt against other,
it ought to bee considered, that thei cannot doe this,
except by meane of the heddes, whiche gouerne them,
To will that the heddes make no disorder, it is neces-
sarie to haue care, that thei get not ouer them to much
auidozitie. And you must consider that this auidozitie,
is gotten either by nature, or by accidente: and as to
nature, it becometh to prouide, that he which is bozen
in one place, be not apointed to the men billed in the
same, but be made hedde of those places, where he hath
not any naturall acquaintance: and as to the accident,
the thing ought to be ordeined in suche maner, that
euery yere the heddes maie be changed from gover-
nement to gouernment: for as muche as the continuall
auidozitie ouer one sorte of menne, breedeth among
them so muche vniion, that it maie turne easely to the
preiudice of the Prince: whiche permutacions holwe
profitable they be to those who haue vsed theim, and
hurtfull to them that haue not obserued theim, it is
well known by the kingdome of the Assyrians, and
by the Emptre of the Romaines: where is seene, that
the same kingdome indured a .v. yeres without tu-
malte, and without any Ciuill warre: whiche proce-
ded not of other, then of the permutacions, whiche
from place to place euery yere the same Capitaines
made, vnto whome were apointed the charge of the
Armies. For for any other occasion in the Romaine
Empire, after the bloud of Cesar was extinguished,
there grewe so many ciuill warres, betwene the Ca-
pitaines of the hostes, and so many conspiracies of the

How to prouide
against suche
inconueniences
as souldiours
maie cause.

The occasion
of ciuill warre
among the Ro-
maines.

The firste booke.

so rated capitaines against the Emperours, but one-
ly for keeping continually still those capitaines alwa-
yes in one government. And if in some of those firste
Emperours, and of those after, whom helde the Em-
pire with reputacion, as Augustus, Marcus, Severus,
and soche like, there had been so moche foresight, that
thei had brought this custome of chaunging the capi-
taines in the same Empire, without doubt it should
have made theim moze quiete, and moze durable: For
that the Capitaines should have had lesse occasion to
make tumultes, the Emperours lesse cause to feare,
and the senate in the laches of the successions, should
have had in the election of the Emperour, moze auc-
thoritie, and by consequence should have been better:
but the naughty custome, either for ignorance, or
throught the little diligence of menne, neither for the
wicked, nor good examples, can be taken a waie.

Cosimo I cannot tell, if with my questioning, I
hate as it were led you out of your order, because fro
the chusing of men, we be entred into an other mat-
ter, & if I had not been a little before excused, I should
thinke to deserue some reprehension.

Fabritio Let not this disquiete you, for that all this
reasoning was necessary, mynding to reason of the
ordinaunce, the which being blamed of many, it was
 requisite to excuse it, willing to haue this first parte of
chusing men to be allowed. But now before I descend
to the other partes, I will reason of the choise of men
on horsebacke. Of the antiquitie, these were made of
the mooste richeste, hauing regard bothe to the yeres,
and to the qualitie of the man, and thei chose. CCC.
for a Legion, so that the Roman horse, in euery Con-
sulles armie, passed not the number of. vi. C.

Cosimo Would you make an ordinaunce of horse,
to exercise them at home, and to vse their seruice whē
nede requirēs?

Fabritio It is most necessary, and it cannot be done
other wise,

The number
of horsemen,
that the Ro-
maines chose
for a Legion,
and for a Con-
sulles armie.

otherwise, minding to haue the power, that it be the owne proper, and not to purpose to take of those, whiche make thereof an arte.

Cosimo. How would you chuse them?

Fabricio. I would imitate the Romanes, I would take of the richest, I would giue them hedges or chief taines, in the same maner, as now a daies to other is giuen, and I would arme them and exercise them.

The choosynge and orderynge of horsemen, that is to bee observed at this present.

Cosimo. To these should it bee well to giue some prouision?

Fabricio. Ye Maie, but so moche onely as is necessary, to kepe the horse, for as moche as bringynge to thy subiectes expenses, they might iustly complaine of thee, therefore it should bee necessarie, to paye theim their charges of their horse.

Cosimo. What number would you make? and how would you arme them?

Fabricio. You passe into an other matter. I will tell you in conuenient place, whiche shal be when I haue tolde you, howe footemenne ought to be armed, and howe a power of menne is prepared, for a daie of battaile.

*The seconde booke of the arte of warre,
of Nicholas Machiauell, Citezeine
and Secretarie of Florence,
vnto Laurence Philip
Serozze.*



Beleeue that it is neces-
sarie, menne bring sounde, to
arme theim, and myndyng to
doe this, I suppose that it is a
needefull thyng to examine,
what armour the antiquitie
vled, and of the same to chose
the beste. The Romaines de-
uided their foote men in bea-

ute and lighte armed: Those that were light armed,
thei called by the name of belitti: Under this name
were vnderstode all those that threwe with slinges,
shotte with Crossebowes, caste Dartes, and thei vled
the mooste parte of them for their defence, to weare on
their hedde a Purion, with a Targaet on their arme:
thei fought out of the orders, and farre of from the bea-
use armed, whiche did weare a hedde pece, that came
doun to their shoulders, a Cosselet, whiche with the
tases came doun to the knees, and thei had the leg-
ges and the armes, couered with greaues, and bam-
byaces, with a targaet on the left arme, a yarde and a
halfe long, and thre quarters of a yarde bryde: which
had a hoope of Iron vpon it, to bee able to sustaine a
blowe, and an other vnder, to the intent, that it being
driue to the yearth, it should not breake: for to offende,
thei had girtte on their left flankte a swerde, the length
of a yarde and a naille, on their right side, a Dagger:
thei had a darte in every one of their handes, the which
thei called Pilo, and in the beginnyng of the fight, thei
threwe those at the enemye. This was the orderyng,
and

How the Ro-
maines armed
their souldiers
and what wea-
pons they vled

and importaunce of tharmoures of the Romaines, by the whiche thei possessed al the worlde. And although some of these auncient writers gave them, besides the so said weapon, a staffe in their hand like unto a Partesen, I cannot tel how a heule staffe, made of hym that holdeth a Targaet bee occupied: for that to handell it with bothe handes, the Targaet should be an impediment, & to occupy the same with one hand, ther can be doen no good therwith, by reason of the weightynesse therof: besides this, to saight in þe throg, & in the orders with soche long kynde of weapon, it is vnprofitable, except in the first front, where thei haue space ynough, to thrust out all the staffe, whiche in the orders within, cannot bee doen, so; that the nature of the battaile (as in the order of the same, I shall tell you) is continually to throng together, which although it be an inconvient, yet in so doing thei feare lesse, the to stand wide, where the perill is moost evident, so that all the weapons, which passe in length a yarde and a halfe, in the throng, be vnprofitable: for that, if a manne haue the Partesan, and will occupy it with bothe handes, put case that the Targaet lette hym not, he cannot hurte with the same an enemye, who is upon hym, if he take it with one hand, to thintent to occupy also the Targaet, being not able to take it, but in the myddest, there remaineth so moche of the staffe behinde, that those whiche are behinde him, shall let him to swelde it. And whether it wer true, either that þe Romaines had not this Partase, or that having it, was little good withal, reade all the battalles, in the hystorie thereof, celebrated of Titus Livius, and you shall se in the same, moost selborne tymes made mention of Partasena; but rather alwayes he saith, that the Partes being shrowen, thei laid their handes on their swearden. Therfore I will leaue this staffe, and observe, concerning the Romaines, the swerde so; to hurt, and so; defence the Targaet, with the other armours as before said.

The seconde booke.

How the Grekes
did arme
themselves,
and what weapons
they used
against their
enemies.

The Grekes did not arme them selves so heavily,
for their defence, as the Romaines did: but for to of-
fend the enemies, they grounded more on their staves,
then on their swordes, and in especially the Fallange
of Spacedonia, whiche used staves, that they called Sa-
rissa, seven paces and a halfe longe, with the whiche
they opened the ranks of their enemies, and they kept
shovels in their Fallange. And although some writers
say, that they had also the Targaet, I cannot tell
(by the reasons also sayd) how the Sarissa and they
could stande together. Besides this, in the battaile
that Paulus Emilius made, with Persa king of Spa-
cedonia, I doe not remember, that there is made any
mention of Targaettes, but onely of the Sarissa, & of
the difficultie that the Romaine armie had, to over-
come them: so that I coniecture, that a Spacedonick
Fallange, was no otherwise, then is now a daies a
battaile of Switzers, the whiche in their pikes have all
their force, and all their power. The Romaines did
garnish (besides the armour) the footmen with sea-
thers: the which thynges makes the sight of an armie
to the frendes goodly, to the enemies terrible.

A brace, and a
terrible thyng
to the enemies.

Howe the Ro-
maines armed
their horsemen
in old tyme.

The armour of the horsemen, in the same first Ro-
maine antiquitie, was a rounde Targaette, and they
had their hedde armed, and the rest unarmed: They
had a swerde and a staffe, with an Iron hedde onely
before, long and small: whereby it happened, that they
were not able to state the Targaette, and the staffe in
the incountering blowe, and they thorough being unar-
med, were subiect to hurtes: after, in proesse of tyme,
they armed them as the footemen, albeit they used the
Targaette moche shorter, square, and the staffe moche
shorter, and with two blades, to the intent, that break-
ing one of the heddies, they might pzenaile with the
other. With these armours as well on foote, as on
horsebacke, the Romaines conquered all the world,
and it is to be beleneved, by the fruit thereof, whiche is

scen.

seen, that thei were the beste appointed armics, that
 euer were: and Titus Livius in his hystorie, doeth tes-
 tifie very often, where comming to comparisn with
 the enemies armies, he saith: But the Romaines, by
 vertue, by the kinde of their armour, and practise in
 the service of warre, were superiours: and therfore I
 haue moze particularly reasoned, of the armour of
 conquerours, then of the conquered. But now me thin-
 kes good, to reason onely of the maner of arming me
 at this presente. Footemen haue so: their defence, a
 breast plate, and so: to offende, a lance, sixe yarden
 and thye quarters long, whiche is called a Pike, with
 a sheard on their side, rather round at the point, then
 sharpe. This is the ordinarie arming of foote menne
 now a daies, so: that fewe there be, whiche haue theis
 legges armed, and their armes, the hedde none, and
 those fewe, beare in steede of a Pike, a Halberde, the
 staffe whereof as you knowe, is twos yarden and a
 quarter longe, and it hath the Iron made like an axe.
 Betwene theim, thei haue Warkebutters, the whiche
 with the violence of the fire, doe the same office, which
 in olde tyme the slingers did, and the Crossebowmen
 do. This maner of arming, was founde out by the
 Duchewenne, in especiall of Switzers, whom beyng
 pooze, and desirous to live free, thei were, and be con-
 strained to saighe, with the ambition of the Princes
 of Almain, to be beyng rich, were able to kepe hoose,
 the whiche the same people could not doe so: poverte.
 Whereby it grew, that beyng on foote, mynding to
 defende theim selues from the enemies, that were on
 horsebacke, it behoueth theim to seeke of the aunciente
 orders, and to finde weapons, whiche from the furie
 of horse, should defende theim: This necessitie hath
 made either to be maintained, or to be founde of them
 the aunciente orders, without whiche, as every pru-
 dente man affirmeth, the footmen is altogether un-
 profitable. Therfore, thei tooke so: their weapon the

99
99

The maner of
 arming menne
 now a daies.

THE MANER OF
 ARMING MENNE
 NOW A DAIES
 THE MANER OF
 ARMING MENNE
 NOW A DAIES

The inuention
 of pikes.

Pike, a mooste profitable weapon, not onely to with-
stande hozses, but to ouercome them: and the Duche-
menne haue by vertue of these weapons, and of these
orders, taken soche boldnesse, that .xx. thousand
of them, will assault the greatest number of hozse that
maie bee: and of this, there hath been seen experience
inough, within this .xx. yeres. And the insam-
ples of their vertue hath been so mightie, grounded v-
pon these weapons, and these orders, that sence kynge
Charles passed into Italie, every nacion hath imita-
ted them: so that the Spanishe armies, are become in-
to mooste greates reputation.

Cosmo. In what maner of armyng, doe you praise
mooste, either these Duchmenne, or the antient Ro-
maines?

Fabius. The Romain without doubt, and I will
tell you the commoditie, and the incommoditie of the
one, and the other. The Duche foote men, are able to
withstande, and ouercome the hozses: thei bee mooste
spedie to marche, and to bee set in aray, beynge not la-
den with armour, as of the other part, thei be subiect to
all blowes, bothe farte of, and at hand: because thei
be unarmed, thei be vnprofitable vnto the battaile on
the lande, and to every saighe, where is strong res-
taunce. But the Romaines withstood, and ouercame
the hozses, as well as the Duchmenne, thei were safe
from blowes at hand, & farte of, byng covered with
armour: thei were also better able to charge, and bet-
ter able to sustain charges, hauing Targets: thei
might moze aptly in the piers saighe with the sword,
then these with the pike, and though the Duchmenne
haue likewise swordes, yet being without Targets,
thei becomen in soche case vnprofitable. The Ro-
maines might safely assault townes, hauing their bo-
dies cleane covered with armour, & beynge better able
to couer thei selues with their Targets: so that
thei had no other incommoditie, then the weight of
of

Whether the
Romaines ma-
ner in armyng
of men, be bet-
ter then the ar-
myng of men,
that is vnder
holo a daye.

Whether the
Romaines ma-
ner in armyng
of men, be bet-
ter then the ar-
myng of men,
that is vnder
holo a daye.

of their armours, and the pain to cary the: the whiche
thinges thei overcame, with accustomyng the body to
diseases, and with hardenyng it, to bee able to indure
labour. And you knowe, how that in thinges accusto-
med, men suffer no grief. And you haue to vnderstand
this, that the footemen maie be constrained, to faight
with footemen, and with horse, and alwaies those be
vnprofitable, whiche cannot either sustain the horses,
or beyng able to sustain them, haue notwithstanding
neede to feare the footemen, whiche be better armed,
and better ordeined then thei. Now if you consider the
Duchemen, and the Romaines, you shall finde in the
Duchemen actiuitie (as we haue said) to overcome the
horses, but greate disauantage, when thei faight
with menne, ordeined as thei them selues are, and ar-
med as the Romaines were: so that there shall be this
aduantage more of the one, then of the other, that the
Romaines could overcome the men, and the horses,
the Duchemen onely the horses.

Cosmo. I would desire, that you would come to
some more particulare insample, whereby wee maie
better vnderstande.

Fabrizio. I saie thus, that you shall finde in many
places of our histories, the Romain footemen to haue
ouercome innumerable horses, and you shall neuer
finde, that thei haue been overcome of men on foote,
for default that thei haue had in their armour, or the
rolwe the bantage that the enemye hath had in the ar-
mour: For that if the maner of their armpng, should
haue had defaulte, it had been necessarie, that there
should folowe, the one of these twoo thynges, either
that findyng soche, as should arme theim better then
thei, thei should nothau gone still forwarde, with
their conquestes, or that thei should haue taken the
straungers maners, and should haue left their owne,
and for that it folowed not in the one thing, nor in the
other, there groweth that ther maie be easily coleau-

The seconde booke.

An ensample
whiche proueth
that horsemen
with slaues, ca
not preuaile ag
gainst footmen
with dikes, &
what great ad
uauntage the
armed haue, ag
gainst the vn
armed.

The victory of
Carminuola
gainst the Du
chmen.

red, that the maner of their arming, was better then the same of any other. It is not yet thus happened to the Duchemen, for that naughtie prose, hath ben seen made them, when soeuer thei haue chanced to faight with men on foote prepared, and as obstinate as thei, the whiche is growen of the baillage, whiche the same haue incountred in the enemies armours. Phillip vicecounte of Milaine, being assaulted of. xviij. thousande Swizzers, sent against thein the Counte Carminuola, whiche then was his capitaine. He with fire thousande horse, and a fewe footmen, went to meete with them, and incounteryng thein, he was repulsed with his moste greate losse: wherby Carminuola as a prudente man, knewe straight waie the puissance of the enemies weapons, and how moche against the horses thei preuailed, and the debilitie of the horses, against those on foote so appointed: and gathering his men together again, he went to finde the Swizzers, and so sone as he was nere them, he made his men of armes, to a light from their horse, & in the same maner faighting with them, he slue thein all, excepte three thousande: the whiche seying them selues to consume, without hauyng reamedy, casting their weapons to the ground, yelded.

Cosimo. Wherof cometh so moche disauantage?

Fabricio. I haue a little afore tolde you, but seying that you haue not vnderstoode it, I will rehearse it againe. The Duchemen (as a little before I said vnto you) as it were vnarmed, to defende themselves, haue to offende, the Pike and the swearde: thei come with these weapons, and with their orders to finde the enemies, whom if thei bee well armed, to defende thein selues, as were the menne of armes of Carminuola, whiche made thein a lighte on foote, thei come with the sweard, and in their orders to find them, and haue no other difficultie, then to come nere to the Swizzers, so that thei make reache them with the sweard, for that

so sone as thei haue gotten vnto the, thei faight safely: so; as moche as the Duch man, cannot strike the nemie with the Pike, who is vpon him, so; the length of the Rasse, wherefoze it is conueniente so; hym, to put the hande to the sweard, the whiche to hym is vnprofitable, he beyng vnarmed, and hauyng against hym an enemye, that is all armed. Whereby he that considereth the vantage, and the disauantage of the one, and of the other, shall see, how the vnarmed, shall haue no manner of remeady, and the ouercommynge of the firste faight, and to passe the firste pointes of the Pikes, is not moche difficulte, he that faighteth beyng well armed: so; that the battailes go (as you shall better vnderstande, when I haue shewed you, how thei are set together) and incounteryng the one the other, of necessity thei thrust together, after soche sorte, that thei take the one the other by the bosome, and though by the Pikes some bee slaine, or ouerthrowen, those that remain on their feete, be so many, that thei suffice to obtaine the victorie. Hereof it greiue, that Carminuola overcame them, with so greate slaughter of the Switzers, and with little losse of his.

The battailes
when thei are a
faighting, doe
thys together.

Cosmo. Consider that those of Carminuola, were men of armes, whom although thei wer on foote, thei were couered all with stele, and therefore thei wer able to make the pouse thei did: so that me thinkes, that a power ought to be armed as thei, myndyng to make the verie same pouse.

Fabricio. If you should remember, how I tolde you the Romaines were armed, you would not thynke so; so; as moche as a manne, that hath the hedde couered with Iron, the breste defended of a Corselet, and of a Hargat, the armes and the legges armed, is moche more apt to defende hymself from the Pike, and to enter among them, then a man of armes on foote. I wil glue you a little of a late ensample. There wer come out of Cicilie, into the kyngdome of Naples, a power
of

The second booke

of Spaniardes, for to go to finde Consaluo, who was besieged in Barlet, of the Frenchemen: there made against them Monsieur de Ubigni, with his menne of armes, and with aboute fower thousande Duchemen on foote: The Duchemen incoutered with their Pikes lowe, and thei opened the power of the Spaniardes: but those beyng holp, by meane of their bucklers and of the agiletie of their bodiles, mingled together with the Duchemen, so that thei might reche the with the swearde, whereby happened the death, almoste of all theim, and the victorie to the Spaniardes. Every man knoweth, how many Duchemen were slaine in the battaile of Ravenna, the whiche happened by the verie same occasion: for that the Spanishe souldiours, got them within a swerdes length of the Duches souldiours, & thei had destroyed them all, if of the French bozsmen, the Duchemen on foote, had not been succored: notwithstanding, the Spaniardes close together, brought themselves into a safe place. I conclude therefore, that a good power ought not onely to be able, to withstande the bozses, but also not to haue fear of menne on foote, the which (as I haue many tymes said) proceedeth of the armours, and of the order.

Cosimo. Tell therefore, how you would arme the

Fabricio. I would take of the Romaine armours, and of the Duchemennes weapons, and I would that the one haulte, should bee appointed like the Romaines, and the other haulte like the Duchemen: for that if in six thousande footemen (as I shall tell you a little hereafter) I should haue thye thousande men with Targaettes, after the Romaine maner, and two thousande Pikes, and a thousande Harkebutters, after the Duches faction, thei should suffice me: for that I would place the Pikes, either in the fronte of the battaile, or where I should seare moste the bozses, and those with the Targaettes and sweardes, shall serue me to make a backe to the Pikes, and to winne the battaile, as I shall

How to arme
men, and what
weapons to ap-
pointe them,
after the Ro-
maine maner,
and Duches fa-
ction.

shall shew you: so that I beleue, that a power thus ordained, should ouercome at this daie, any other power.

Cosimo. This whiche hath been said, sufficeth concerning footemen, but concerning horsemen, we desire to vnderstande, whiche you thinke moze stronger armed, either olwers, or the antiquitie?

Fabricio. I beleue that in these daies, having respect to the saddelles bolstered, and to the stirrappes not vided of thantiquitie, thei stande moze strongly on horse backe, then in the olde tyme: I thinke also thei arme them moze sure: so that at this daie, a bande of men of armes, paissng very moche, cometh to bee with moze difficultie withstoode, then were the horsemen of olde tyme: notwithstanding so; all this, I iudge, that there ought not to be made moze accompt of horses, then in old tyme was made, so; that (as afoze is said) many times in our daies, thei haue with the footemen receiued shame, and shall receive alwaies, where thei encounter, with a power of footemen armed, and ordered, as aboue hath been declared. Tigrane kynge of Armenia, had againste the armie of the Romaines, whereof was capitaine Lucullo, Cl. thousande horsemen, amongest the whiche, were many armed, like vnto our men of armes, which thei called Catafratti, and of the other part, the Romaines were aboute fire thousande, with. xvj. thousande footemen: so that Tigrane seying the armie of the enemies, said: these bee horses inough for an imbassage: notwithstanding, in counteryng together, he was ouerthrowen: and he that waiteth of the same fight, dispaiseth those Catafratti, declaring them to bee vnprofitable: so; that he saileth, bicause thei had their faces couered, thei hadde moche adoe to see, and to offende the enemye, and thei sallyng, beeyng laden with armour, could not rise vp again, nor welde thei selues in any maner to pzeuaile. I saie therefore, that those people or kingdomes, whiche shall esteeme moze the power of horses, then the po-

The victorie of
Lucullo, agas.
in the Tigrane
king of Arme-
nia.

For what pur-
pose hoſemen
be moſt requi-
ſed.

her of footemen be alwaies weake, and ſubiect to all
ruine; as by Italie hath been ſern in our tyme; the
lohicke hath been taken, ruinated, and ouer run with
ſtraungers, thzough no other faulte, then ſo; hauing
taken little care, of the ſeruile on ſoote; and beeyng
bzought the ſouldiours thereof, al on hoſebacke. Yet
there ought to be had hoſſes, but ſo; ſeconde, and not
ſo; firſt foundation of an armie: ſo; that to make a diſ-
couery, to ouer run, and to deſtroye the enemies coun-
trie, and to kepe troubled and diſquieted, the armie of
theſame, and in their armours alwaies, to let them of
their victualles, thei are neceſſarie, and moſtey poſita-
ble; but concerning ſo; the waie of battaille, and ſo; the
ſaigt in the fielde, whiche is the impoſtaunce of the
warre, and the ende, ſo; whiche the armies are o; deſi-
ned, thei are moze meter to ſolowe the enemye beeyng
diſcomfited, then to doe any other thing, whiche in the
ſame is to bee doen, and thei bee in compariſon, to the
footemen, moche inferiour.

For what pur-
poſe hoſemen
be moſt requi-
ſed.

Cosmo. There is happened vnto me two doubt-
es, the one, where I knowe, that the Parthians did not
uſe in the warre, other then hoſſes, and yet thei deu-
iſed the world with the Romaines: the other is, that
I would that you ſhould ſhew, how the hoſemen can
be withſtoode of footemen, and whereof groweth the
ſtrength of theſe, and the debilitie of thoſe.

Fabius. Either I haue told you, or I minded to tell
you, how that my reaſoning of the affaires of warre,
ought not to paſſe the boundes of Europe: when thus
it is, I am not bounde vnto you, to make account of
theſame, whiche is ſed in Asia, yet I muſte ſaie vnto
you thus, that the warring of the Parthians, was al-
together contray, to theſame of the Romaines: ſo; as
moche as the Parthians, warred all on hoſebacke,
and in the ſaigt, thei proceeded confuſedly, and ſcatter-
ed, and it was a manner of ſaigt vniſtable, and full of
vncertaintie. The Romaines were (it maie be ſaied)

ſaue

almoſt

almoſt

almoste al on foote, and thei fought close together and
 sure, and thei overcame diuersly, the one the other, ac-
 cording to the largenesse, or straightnesse of the situa-
 tion: for that in this the Romaines were superiours,
 in the same the Parthians, whom might make greate
 proofe, with the same manner of warryng, considering
 the region, whiche thei had to defende, the which was
 mooste large: for as moche as it hath the sea coaste, di-
 stant a thousande miles, the riuers thone fro thother,
 twoo or thre daies iourney, the townes in like maner
 and the inhabitants seuer: so that a Romaine armie
 heauie and slowe, by meanes of their armour, and
 their orders, could not over run it, without their grea-
 nous hurt (those that defended it, being on horsebacke
 mooste expedite) so that thei were to daie in one place,
 and to morowe distant fiftie miles. Herof it greeue,
 that the Parthians might preuaile with their chival-
 rie onely, bothe to the ruine of the armie of Crassus,
 and to the perill of the same, of Marcus Antonius: but
 I (as I haue told you) doe not intende in this my rea-
 sonyng, to speake of the warfare out of Europe, there-
 fore I will stand vpon the same, whiche in times past,
 the Romaines ordained, and the Grekes, and as the
 Duchemen doe now adales. But let vs be to the other
 question of yours, where you desire to vnderstande,
 what order, or what naturall vertue maketh, that the
 footemen overcome the horsemen. And I saie vnto you
 first that the horses cannot go, as the footmen in euery
 place: Thei are slower then the footemen to obeye,
 when it is requisite to alter the order: for as moche, as
 if it be needefull, either goyng forward, to turne backe
 warde, or turning backward, to go forward, or to
 moue themselves standing still, or goyng to stand still,
 without doubt, the horsemen cannot doo it so redillie
 as the footemen: the horsemen cannot, being of some
 violence, disordered, retorne in their orders, but with
 difficultie, although the same violence cease, the which

The reason why
 footmen are as-
 ble to overcome
 horsemen,

because the
 horsemen are
 not so quick
 as the footmen

the footemen doo moſte eaſely and quickly. Beſides
 this, it happeneth many tymes, that a hardie manne
 ſhall be vpon a vile horſe, and a coward vpon a good,
 whereby it foloweth, that this euill matчыng of ſto-
 mackes, makes diſorder. For no man doeth maruell,
 that a bande of footemenne, ſuſtaineth all violence of
 horſes: ſo that a horſe is a beaſte, that hath ſence, and
 knoweth the perilles, and with an ill will, will enter
 in them: and if you conſider, what force maketh them
 go ſo warde, and what holdeth them backwarde, you
 ſhall ſe without doubt, theſame to be greater, whiche
 kepeth them backe, then that whiche maketh them go
 ſo warde: ſo that the ſpurre maketh them go ſo
 warde, and of the other ſide, either the ſwearde, or the
 whike, kepeth them backe: ſo that it hath been ſeen by
 the olde, and by the late experience, a bande of foote-
 men to bee moſte ſafe, y^e, in ſightle ſo horſes. And if
 you ſhould argue to this, that the beaſte, with whiche
 thei come, maketh them more furious to encounter,
 who that would withſtande them, and leſſe to regard
 the whike, then the ſpurre: I ſaie, that if the horſe ſo di-
 ſpoſed, begin to ſee, that he muſt run vpon the pointe
 of the whike, either of himſelf, he will refrain the courſe
 ſo that ſo ſone as he ſhall feele himſelf pricked, he will
 ſtande ſtill atones, or beeing come to them, he will
 tourne on the right, or on the leſte hande. Whereof if
 you will make experience, you to run a horſe againſt
 a walle: you ſhall finde ſewe, with what ſo euer ſarie
 he come withall, will ſtrike againſt it. Ceſar hauing
 in France, to fighte with the Swiſſers, a lighted,
 and made every manne a light on foote, and to auoide
 from the arkies the horſes, as a thyng more meete to
 ſle, then to fighte. But notwithstanding theſe natu-
 rall impedimentes, whiche horſes haue, theſame Ca-
 pitaine, whiche leadeth the footemen, ought to chuſe
 waies, whiche haue ſo horſe, the moſte impedimentes
 that may bee, and ſeldome tymes it happeneth, but
 that

How footmen
 maye ſave them
 ſelves from
 horſemen.

How footmen
 maye ſave them
 ſelves from
 horſemen.

that a manne maie saue hymself, by the qualitie of the
countrie: for that if thou marche on the hilles, & situa-
cion doeth saue thee from the same furie, whereof you
doubt, & thei go withall in the plain, fewe plaines be,
whiche throught the tillage, or by meanes of the wod-
des, doe not assure thee: for that every hillocke, every
backe, although it be but small, taketh a waie the same
heate, and every culture where bee vines, and other
trees, lettes the horses: and if thou come to battaile,
the very same lettes happeneth, that chaunceth in
marchyng: for as moche as every little impedemente,
that the horse hath, abateh his furie. One thyng
notwithstandyng, I will not forgette to tell you,
how the Romaines esteemed so moche their orders,
and trusted so moche to their weapons, that if thei
shuld haue had, to chuse either so rough a place to saue
theim selues from horses, where thei should not haue
been able, to raise their orders, or a place where thei
should haue neede, to feare more of horses, but ben able
to defende their battaile, al waies thei toke this, and
left that: but bicause it is tyme, to passe to the armie,
hauing armed these souldiours, accoording to the au-
cients and newe vse, let vs see what exercises the Ro-
maines caused theim make, befoze the menne were
brought to the battaile. Although thei be well chosen,
and better armed, thei ought with mooste greates studie
be exercised, for that without this exercise, there was
never any souldiour good: these exercises ought to be
deuided into thre parties, the one, for to harden the
bodie, and to make it apte to take paines, and to bee
more swifter and more readier, the other, to teach the,
how to handell their weapons, the third, for to learne
them to kepe the orders in the armie, as well in mar-
chyng, as in faightyng, and in the incampyng: The
whiche be thre principall actes, that an armie doeth:
for as moche, as if an armie marche, incampe, & faight
with order, and expertly, the Capitaine leseth not his

The exercise of
Souldiours,
ought to be de-
uided into thre
partes.

The seconde booke.

What exercises
for the ancient
common wea-
les used to exer-
cise their youth
in, & what com-
modities ensued
thereby.

honoure, although the battaile should haue no good
ende. Therfore, all thauuncient common weales, pro-
uided these exercises in maner, by custome, & by lawe,
that there should not be left behinde any part thereof.
Thei exercised then their youth, for to make the swift,
in runnyng, to make them readie, in leapyng, for to
make them strong, in throttyng the barre, or in wy-
flyng: and these thre qualities, be as it were necessa-
rie in souldiours. For that swiftnesse, maketh them
apte to possesse places, before the enemye, and to come
to them vnloked for, and at vnwares to pursue them,
when they are discomfited: the readinesse, maketh
them apte to auoide a blowe, to leape over a ditch, to
winne a banke: strength, maketh them the better able
to beare their armour, to encounter the enemye, to
withstande a violence. And aboue all, to make the bo-
die the more apte to take paines, they used to beare
greate burthens, the whiche custome is necessarie: for
that in difficulte expeditions, it is requisite many ty-
mes, that the souldiour beside his armour, beare vi-
tualles for many daies, and if he were not accustomed
to this labour, he could not dooe it: and without this,
there can neither bee auoided a perill, nor a victorie
gotten with same. Concernyng to learne how to han-
dell the weapons, they exercised them, in this maner:
they would haue the yong menne, to put on armour,
whiche should wale twise as moche, as their field ar-
mour, and in steede of a swearde, they gaue them a cud-
gell leaded, whiche in comparison of a herie swearde
in deede, was mooste heauie: they made for euery one of
them, a poste to be set vp in the ground, which should
be in height two yardes and a quarter, and in soche
maner, and so strong, that the blowes should not stir
nor hurle it downe, against the whiche poste, the yong
man with a targaet, and with the cudgell, as against
an enemye did exercise, and some whiles he stroke, as
though he would hurte the hedde, or the face, some-
while

How the anti-
quitie, learned
their yong sol-
diours, to han-
dell their wea-
pons.

while he retired backe, an other while he made for-
warde: and thei had in this exercise, this aduertisment,
to make theim apt to couer thir selues, and to burte
the enemy: and hauing the counterfaight armours
moſte heauy, their ordinarie armours ſemed after vn-
to the moze lighter. The Romaines, would that their
ſouldiours ſhould hurte with the picke, and not with
the cutte, as well bicauſe the picke is moze mortalle,
and hath leſſe defence, as alſo to the intent, that he that
ſhould hurt, might lye the leſſe open, and be moze apt
to redouble it, then with cuttes. Dooe not maruaile
that theſe auncient men, ſhould thinke on theſe ſmall
thynges, ſo; that where the incounteryng of men is
reaſoned of, you ſhall perceiue, that enery little vau-
tage, is of greate importaunce: and I remember you
theſame, whiche the writers of this declare, rather
then I to teache you. The antiquitie eſtimated nothing
moze happie, in a comon weale, then to be in theſame,
in any men exerciſed in armes: bicauſe not the ſhining
of pꝛecious ſtones and of golde, maketh that the ene-
mies ſubmit themſelues vnto thee, but onely the fear
of the weapons: afterwarde, the errors whiche are
made in other thynges, maie ſometymes be corrected,
but thoſe whiche are dooen in the warre, the paine
ſtraight waie comyng on, cannot be amended. Be-
ſides that, the knowlege to ſaight, maketh men moze
bold, bicauſe no man feareth to doe that thing, which
he thinketh to haue learned to doe. The antiquitie
would therefore, that their Citezeins ſhould exerciſe
themſelues, in all martiall feates, and thei made them
to thꝛowe againſt theſame poſte, dartes moche heuier
then the ordinarie: the whiche exerciſe, beſides the ma-
king men expert in thꝛowyng, maketh alſo the arme
moze nimble, and moche ſtronger. Thei taught them
alſo to ſhote in ſ long bowe, to whoyle with the ſling:
and to all theſe thynges, thei appointed maiſters, in
ſoche manner, that after when thei were choſen ſo; to

What thant
quie eſtmed
moſte happie
in a comon
weale.

another mat-
ters, for the ex-
erciſing of yong
men vncertaine.

The second booke

go to the warre, thei were now with mynde and disposition, souldiours. For there remained the to learn other, then to go in the orders, and to maintain them selues in those, either marchyng, or faghtyng: The whiche moste easely thei learned, mingeling themselves with those, whiche had long tyme serued, where by thei knewe how to stande in the orders.

Cosmo. What exercises would you cause them to make at this present?

The exercises that souldiers ought to make in these daies.

Fabricio. A good many of those, whiche haue been declared, as runnyng, and wrestlyng, makyng them to leape, makyng them to labour in armours, morche heavier then the ordinarie, making them shoote with Crosse bowes, and longe bowes, wherevnto I would loyne the barkabus, a newe instrument (as you know) verie necessarie, & to these exercises I would vse, al the youth of my state, but with greater industrie, & more sollicitatenesse the same parte, whiche I should haue already appointed to serue, and alwaies in the idell daies, thei should bee exercised. I would also that thei should learne to swimme, the whiche is a thyng verie profitable: for that there be not alwaies, bridges ouer riuers, hoates be not alwaies readye: so that thy army not knowyng howe to swime, remaineth depriued of many commodities: and many occasions to wooke well, is taken a wale. The Romaines for none other cause had ordained, that the yong men should exercise them selues in *Campus Martius*, then onely, for that ha-uyng *Liber* at hande, thei might, beyng werled with the exercise on lande, refresh the them selues in the water, and partly in swimmyng, to exercise them selues. I would make also, as the antiquitie, those whiche should serue on horsebacke to exercise, the whiche is moste necessarie, for that besides to know how to ride, thei muste knowe how on horsebacke, thei maye preserue the selues. And for this thei had ordeined horses of wood, vpon the which thei practised, to leape by armed,

The exercise of swimmyng.

Tiber, so a river runnyng through Rome the water whereof will neuer corrupte.

The exercise of vaultyng, and the commodities thereof.

armed, and binarmed, without any helpe, and on euery hande: the whiche made, that atones, and at a beck of a capitaine, the hoysmen were on foote, and likewise at a token, thei mounted on horsebacke. And so the exercises, bothe on foote and on horsebacke, as thei were then easie to bee done, so now thei should not be difficult to the same common weale, or to the same prince, whiche would cause them to be put in practise of their yong men. As by experience is seen, in certaine cities of the Weste countrie, where is kepte a liue like manners with this order. Thei deuide all their inhabiteurs into diuers partes: and euery parte thei name of the kinde of those weapons, that thei vse in the warre. And so that thei vse Pikes, Halbardes, Bowes, and Harkebuses, thei call them Pike menne, Halberders, Harkebutters, and Archars: Wherefore, it is mete so that all the inhabiteurs to declare, in what orders thei will be appointed in. And so that all men, either so age, or so other impedimentes, be not fitte so the warre, euery order maketh a choise of men, and thei call them the sworn, whom in idell daies, be bounde to exercise themselves in those weapons, wherof thei be named: and euery manne hath his place appointed hym of the cominaltie, where so the exercise ought to be made: and those whiche be of the same order, but not of the sworn, are contributaries with their money, to the same expenses, whiche in so the exercises be necessarie: therfore the same that thei doe, we maie doe. But our smal prudence dooeth not suffre vs, to take any good waie. Of these exercises there grewe, that the antiquitie had good souldiours, and that now those of the Weste, bee better men then ours: so as moche as the antiquitie exercised them, either at home (as those common weales doe) or in the armies, as those Emperours did, so thocassions as ofesaied: but we, at home will not exercise them, in Campe we cannot, because thei are not our subiectes, and so that we are not able to binde the

An order that is taken in certain countries, concerning exercises of warre.

The seconde booke.

to other exercises then thei them selues like to doe: the
whiche occasion hath made, that firste the armie be
neglected, and after, the orders, and that the kynge do-
mes, and the common weales, in especially Italians,
lie in soche debilitie. But let vs tourne to our order,
and folowynge this matter of exercises, I saie, how it
suffiseth not to make good armie, for haupng hard-
ned the men, made them strong, swift, and handsome,
where it is nedefull also, that thei learne to stande in
the orders, to obeie to signes, to sounes, and to the
voice of the capitaine: to knowe, standynge, to retire the
selues, goynge forwardes, bothe saightynge, and mar-
chyng, to maintain those: because without this know-
lege, withal serious diligence obserued, and practised,
there was neuer armie good: and without doubt, the
fierce and disordered menne, bee moche more weaker,
then the fearfull that are ordered, for that the order by-
meth alwaie fro men feare, the disorder abateth fierces-
nesse. And to the entente you maie the better perceiue
that, whiche here folowynge shalbe declared, you haue
to vnderstande, how euery nation, in the orderynge of
their men to the warre, haue made in their hoste, or in
their armie, a principall member, the whiche though
thei haue varied with the name, thei haue little varied
with the number of the menne: for that thei all haue
made it, betwene five and. viij. M. men. This number
of men was called of the Romaines, a Legion, of Gre-
kes a Fallange, of Frenchemen Caterne: this verie
same in our tyme of the Switzers, whom onely of the
auncient warfare, kepe some shadowe, is called in their
tongue that, whiche in ours signifieth the maine bat-
talle. True it is, that euery one of them, hath after de-
uided it, accordynge to their purposes. Therefore me
thinkes beste, that wee grounde our talke, vpon this
name mooste knowne, and after, accordynge to the au-
cient, and to the orders now adaires, the beste that is
possible to ordaine it: and because the Romaines deu-
ded

What know-
lege a Soule-
our ought to
haue.

ded their Legion, whiche was made betwene five and
 six thousande men, in ten Cohortes, I will that wee
 deuide our maine battaile, into ten battailes, and that
 we make it of six thousande menne on foote, and we
 will giue to enery battaile. CCC. men, of whiche
 shall be. CCC. armed with heauie armour, and. L.
 with light armour: the heauie armed, shall be. CCC.
 Targettes with sweardes, and shall be called Target
 men: and. C. with Pikes, whiche shall be called ordina
 rie Pikes: the light armed shall be. L. men armed with
 Harkebuses, Crosse bowes, and Partisans, and smal
 Targaettes, and these by an aunciente name, were
 called ordinarie Meliti: all the ten battailes therefore,
 comes to haue thre thousande Targaet men, a thou
 sande ordinarie Pikes. CCC. ordinarie Meliti, all
 whiche make the number of sower thousande and five
 hundred men. And we saied, that we would make the
 maine battaile of six thousande: therefore there must
 be added an other thousande, five hundred men, of the
 whiche I will appoint a thousande with Pikes, who
 I will call extraordinarie Pikes, and five hundred
 light armed, whom I will call extraordinarie Meliti:
 and thus my menne should come (as a little before I
 haue saied) to be made halfe of Targaetes, and halfe
 of Pikes and other weapons. I would appointe to e
 uerie battaile, or bande of men, a Conestable, sower
 Centurions, and foure peticapitaines, and moze,
 ouer a hedde to the ordinarie Meliti, with five petica
 pitaines: I would giue to the thousande extraordina
 rie Pikes, thre Conestabelles, ten Centurions, and
 a hundred peticapitaines: to the extraordinarie Meliti,
 two Conestabelles, v. Centurions, and. L. peticapita
 nes: I would then appoint a generall hed, ouer all the
 maine battaile: I would that enery Conestable should
 haue an Ansigne, and a Drum. Thus there should be
 made a maine battaile of ten battailes, of thre thou
 sande Targaet men, of a thousande ordinarie Pikes,

A Cohorte is a
 bande of men.

Of what number
 & of what kind
 of armour &
 weapons, a
 maine battaile
 ought to bee,
 and the distri
 buting and ap
 pointing of
 the same.

Meliti are light
 armed men.

The capitai
 nes that are ap
 pointed to eue
 ry band of me,

The seconde booke.

of a thousande extraoꝛdinarie, of five hundred oꝛdinarie
Weliti, of five hundred extraoꝛdinarie, so there
should come to bee five thousande men; emongeste the
whiche there should bee **P. D.** peticapitaines, & moꝛe
ouer. **rb.** Constables, with. **rb.** Drummes, and. **rb.**
Ansignes, **lb.** Centurions, **r.** heddes of the oꝛdinarie
Weliti, and a Capitaine ouer all the maine battaile,
with his Ansigne and Dꝛumme: and I haue of purpose
repeated this oꝛder the oftener, to the intent, that af-
ter when I shall shewe you, the maners of oꝛdering
the battailes, and tharmies, you should not be confu-
ded: I saie therfore, hoꝛ that, that king, oꝛ that com-
mon weale, whiche intendeth to oꝛdaine their subiec-
tes to armes, ought to appointe them with these ar-
moures and weapons, and with these partes, and to
make in their countrie so many maine battailes, as it
were able: and when thei should haue oꝛdained them,
accoꝛding to the soꝛsaid distribucion, minding to exer-
cise them in the oꝛders, it should suffice to exercise ene-
ry battaile by it self: and although the number of the
men, of euery one of them: cannot by it self, make the
facion of a iuste armie, notwithstanding, euery man
maie learne to dooe thesame, whiche particularly ap-
pertaineth vnto hym: so; that in the armies, twoo oꝛ-
ders is obserued, the one, thesame that the men ought
to doe in euery battaile, and the other that, whiche the
battaile ought to doe after, when it is with the other
in an armie. And those men, whiche doe wel the first,
mooste easely maie obserue the seconde: But without
knowyng thesame, thei can neuer come to the know-
lege of the seconde. When (as I haue saied) euery one
of these battailes, maie by them selues, learne to kepe
the oꝛders of the armes, in euery qualitie of mouyng,
and of place, and after learne to put them selues toge-
thers, to vnderstande the soundes, by meanes wherof
in the faight thei are commaunded, to learne to know
by that, as the Gallies by the whiffell, what ought to
be

Twoo oꝛders
obserued in an
armie.

be born, either to stande still, or to tourne forward, or to tourne backward, or whiche waie to tourne the weapons, and the face: so that knowyng how to kepe well the arais, after soche sorte, that neither place nor mouyng maie disorder them, vnderstandyng well the commaundementes of their heddes, by meanes of the sounde, and knowyng quickly, how to retourne into their place, these battailes maie after easly (as I haue said) beyng brought many together, learne to do that, whiche all the body together, with the other battailes in a iuste armie, is bounde to doo. And bicause soche vniuersall practise, is also not to bee esteemed a little, ones or twise a yere, when there is peace, all the main battaile maie be brought together, to giue it the facion of an whole armie, some daies exercisynge them, as though thei should fight a fiede, setting the fronte, and the sides with their succours in their places. And bicause a capitaine ordeineth his hoste to the fiede, either for conuynce of the encmie he seeth, or for that, of whiche without sayng he doubteth, he ought to exercise his armie in the one maner, and in the other, and to instructe them in soche sorte, that thei maie knowe how to marche, & to fight, where orde should require, they wyng to his souldiours, how thei should gouerne them selues, when thei should happen to be assaulted of this, or of that side: and where he ought to instructe them how to fight againste the encmie, whom thei should see, he must shewe them also, how the fight is begun, & where thei ought to retire: being ouerthrowen, who hath to succede in their places, to what signes, to what sounes, to what voces, thei ought to obey, and to practise the in soche wyse in the battaile, and with fained assaules, that thei may desire the verie thyng in dedde. For that an armie is not made courageous, bicause in the same be hardie menne, but by reason the orders thereof bee well appointed: For as moche as if I be one of the first fighters, & do knowe,

How a captaine
muste instructe
his souldiours
how thei ought
to gouerne the
selues in the
battaile.

The second booke

being overcome, where I may retire, and who hath
to succede in my place, I shall alwaies saight with
bolones, setting my succour at hand. If I shall be one of
the seconde saighters, the first being giuen backe, and
ouerthrowen, I shall not bee afrayed, for that I shall
haue presupposed that I may bee, and I shall haue de-
sire to be the same, whiche may giue the victorie to my
maister, and not to bee any of the other. These exerci-
ses bee mooste necessarie, where an armie is made of
newe, and where the old armie is, they bee also neces-
sarie: for that it is also seen, how the Romaines knew
from their infancie, the order of their armies, notwithstanding
standing, those capitaines before they should come to
the enemy, continually did exercise them in those. And
Josephus in his historie saith, that the continuall exer-
cises of the Romaine armies, made that all the same
multitude, whiche followe the campe for gain, was in
the date of battaile profitable: because they all knewe,
how to stande in the orders, and to saight keeping the
same: but in the armies of newe men, whether thou
haue putte them together, to saight straight waile, or
that thou make a power to saight, when neede requi-
res, without these exercises, as well of the battailes se-
uerally by themselves, as of all the armie, is made no-
thing: wherefore the orders being necessarie, it is con-
ueniente with double industrie and labour, to shewe
them vnto suche as knoweth the not, and for to teache
it, many excellent capitaines haue trauailed, without
any respect.

Cosmo. I thinkes that this reasoning, hath som-
what transported you: for asmoche, as hauing not yet
declared the waies, with the whiche the battailes bee
exercised, you haue reasoned of the whole armie, and
of the date of battaile.

Fabricio. You saie truth, but surely thocasion hath
been the affection, whiche I beare to these orders, and
the grief that I feele, seeing they be not put in exerci-
with.

Withstanding, doubt not but that I will tourne to the purpose: as I haue saied, the chief importance that is in the exercise of the battailes, is to knowe how to keepe well the arraes: and because I tolde you that one of these battailes, ought to bee made of fower hundred men heauie armed, I wil stae my self vpon this number. Thei ought then to be brought into. lxxx. rankes, and five to a ranke: after ward going fast, or softly, to knit them together, and to lose them: the whiche how it is dooen, maie bee shewed better with deedes, then with wordes. Which nedeth not greily to be taught, so; that every manne, whom is practised in seruise of warre, knoweth how this order procedeth; whiche is good for no other, then to vse the souldiours to keepe the raie: but let vs come to putte together one of these battailes, I saie, that there is giuen them three facions principally, the first, and the moste profitable is, to make a massiue, & to giue it the facion of two squares, the second is, to make it square with the front hoyned, the thirde is, to make it with a boide space in the midst: the maner to put men together in the first facion, maie be of twoo sortes, thone is to double the rankes; that is, to make the seconde ranke enter into the first, the fift. into the thirde, the sixt into the fift, & so forth, so that where there was. lxxx. rankes, five to a ranke, thei maie become. xl. rankes. v. to a ranke. Afterward cause theim to double ones more in the same maner, settynge the one ranke into an other, and so there shall remain twentie rankes, twentie men to a ranke: this maketh twoo squares aboute, so; as moche as albeist that there bee as many men the one waie, as in the other, notwithstanding to wardes the hedde, thei ioine together, that the one side toucheth the other: but by the other waie, thei be distant the one from the other, at least a yerde and a haulte, after soche sorte, that the square is moche longer, from the backe to the fronte, then from the one side to thother: and because we haue

The chief importance in the exercising of bandes of m. n

Three principall facions for the ordering of men into battaile raie.

The maner how to bring a bande of men into battaile raie after a square facion.

The second booke

at this presente, to speake often of the partes afoze, of behinde, and of the sides of these battailes, and of all the armie together, knowe you, that when I saie either hedde or fronte, I meane the parte afoze, when I shall saie backe, the part behind, when I shall saie flanks, the partes on the sides. The fiftie ordinarie beliti of the battaile, muste not mingle with the other ranks, but so lone as the battaile is factioned, thei shalbe set a long by the flanks therof. The other waie to set together the battaile is this, and bicause it is better then the firste, I will set it before your eyes iuste, how it ought to bee ordeined. I beleue that you remember of what nomber of menne, of what beddes it is made, and of what armours thei are armed: then the faction, that this battaile ought to haue, is (as I haue saied) of twentie ranks, twentie men to a ranke, fure ranks of pikes in the front, and fiftene ranks of Targaettes on the backe, twoo Centurions standyng in the fronte, twoo behinde on the backe, who shall execute the office of those, whiche the antiquitie called Tergiducos. The Constable with the Ansigne, and with the Drumme, shall stande in the same space, that is betwene the fure ranks of the pikes, and the fiftene of the Targaettes. Of the Peticapitaines, there shall stande one vpon euery side of the ranks, so that euery one, maie haue on his side his men, those peticapitaines, whiche shalbe on the left hande, to haue their men on the right hand, those peticapitaines, whiche shall be on the right hand, to haue their menne on the left hande: The fiftie beliti, muste stande a long the flanks, and on the backe of the battaile. To mynde now, that this battaile maie be set together in this faction, the men goyng ordinarily, it is conuenient to order them thus. Make the men to be brought into xxx. ranks, fure to a ranke, as a little afoze we haue saied, leauyng the beliti either at the hedde, or at the taile, so that thei stande out of this order: and it ought to be ordeined

The better
waie for the or-
ding of a band
of men in bat-
talle rate, after
the first faction.

whereas the
power of the
armie is divided
into three parts
the first part
is the front
the second part
is the flank
the third part
is the backe

ordained, that every Centurion haue behinde his backe
twentye rankes, and to bee nexte behinde every Cen-
turion, fve rankes of Pikes, and the reste Targaet-
tes. The Conestable shall stande with the Drum, and
the Ansigne, in the same space, whiche is betwene the
Pikes, and the Targaettes of the seconde Centurion,
and to occupye the places of thre Targaette men. Of
the Decapitaines, twentye shall stand on the sides of
the rankes, of the first Centurion, on the lefte hande,
and twentye shall stande on the sides of the rankes, of
the last Centurion on the right hande. And you muste
vnderstande, that the Decapitaine, whiche hath to
leade the Pikes, ought to haue a Pike, and those that
leade the Targaettes, ought to haue like weapons.
When the rankes beynge brought into this order, and
myndynge in marchynge, to byng the into battaile, so
to make the hedde, the first Centurion must be caused
to stande still, with the firste twentye rankes, and the
seconde to procede marchynge, and tournynge on the
right hand, he must go a long the sides of the twentye
rankes that stande still, till he come to bee even with
the other Centurion, where he must also stande still,
and the thirde Centurion to procede marchynge, like-
wise tournynge on the right hand, and a long the sides
of the rankes that stande still, must go so farre, that he
be even with the other two Centurions, and he also
standynge still, the other Centurion must folowe with
his rankes, likewise tournynge on the right hand, a
longe the sides of the rankes that stande still, so farre
that he come to the hed of the other, and then to stand
still, and straight waie two Centurions onely, shall
depart from the front, and go to the backe of the bat-
taile, the whiche cometh to bee made in the same ma-
ner, and with the same order iuste, as a little afoze I
haue shewed you. The Allet muste stande a long, by
the flanks of the same, accordynge as is disposed in the
first waie, whiche waie is called redoublynge by right
line,

The seconde booke.

line, this is called redoublyng by flanke: the first waie is moze easie, this is with better order, and cometh better to passe, and you maie better correcte it, after your owne maner, so that in redoublyng by right line, you muste bee ruled by the number, because five maketh ten, ten twentie, twentie fourtie, so that with redoublyng by right line, you cannot make a hedde of fiftene, nor of five and twentie, nor of thirtie, nor of five and thirtie, but you must go where the same number will leade you. And yet it happeneth every daie in particulare affaires, that it is convenient to make the forwarde with five hundred, or eight hundred men, so that to redouble by right line, should disorder you: therefore this liketh me better: that difficultie that is, ought moste with practise, & with exercise to bee made easie. Therefore I saie vnto you, how it importeth moze then any thyng, to haue the souldiours to know how to set themselves in arais quickly, and it is necessarie to keepe them in this battaile, to exercise them therein, and to make them to go apace, either forward or backward, to passe through difficulte places, without troubling thorder: so as muche as the souldiours, whiche can doe this well, be expert souldiours, and although thei haue neuer seen enemies in the face, thei maie be called old souldiours, and contrariwise, those whiche cannot keepe these orders, though thei haue been in a thousande warres, thei ought alwaies to be reputed new souldiours. This is, concernyng setting them together, when thei are marching in small ranks: but beyng set, and after beyng broken by some accident or chaunce, whiche groweth either of the situation, or of the enemye, to make that in a sodaine, thei maie come into order againe, this is the importaunce and the difficultie, and where is needfull moche exercise, and moche practise, and wherin the antiquitie bestowed moche studie. Therefore, it is necessarie to doe three thynges, firste to haue this battaile full of counter signes,

ter signes, the other, to keepe alwaies this order, that those same men make stand alwaies in y^e ranke, which thei were firste placed in: as so; insample, if one hath begon to stande in the seconde, that he stande after alwaie in that, and not onely in that self same ranke, but in that self same place: so; the obseruyng whereof (as I haue saied) bee necessarie many countersignes. In especially it is requisite, that the Ansigne bee after soche sozte countersigned, that companyng with the other battalles, it maie be knowen from theim, accordyng as the Conestable, and the Centurions haue plumes of fethers in their heddes differente, and easie to be knowen, and that whiche importeth mooste, is to ordaine that the peticapitaines bee knowen. Wherunto the antiquitie had so moche care, that thei would haue nothing els wrytten in their hedde peces, but the number that thei were named by, calling them firste, seconde, thirde, and fourthe. &c. And yet thei were not contented with this, but made euery souldiour to haue wrytten in his Targaet, the number of the ranke, and the number of the place, in whiche ranke he was appointed. When the menne being countersigned thus, and vsed to stande betwene these limites, it is an easie thyng, thei beyng disordered, to sett them all agayne quickly into order: considering, that the Ansigne standyng still, the Centurions, and the Peticapitaines make gesse their places by the eye, and beyng brought the left of the left, the right of the right, with their accustomed distance, the souldiours led by their rule, and by the differences of the cognisances, maie be quickly in their proper places, no otherwile, then as if the boordes of a tunne should bee taken a sunder, whiche beyng first marked, mooste easely maie bee set together again, where the same beyng not countersigned, were impossible to bring into order any moze. These thynges, with diligence and with exercise, are quickly taught, and quickly learned, and beyng learned, with

how to exercise men, & to take soche order, whereby a band of me that leet by what focuer chace disordered maye straighte way be brought into order againe.

What aduer-
tisement ought
to be vied in
tourning about
a whole bande
of menne, after
suche sort, as
though it were
but one bodie.

difficultie are forgotten: so that the newe menne, be-
led of the olde, and with tyme, a province with these
exercises, may become thoroughly practised in the war.
It is also necessarie to teachethem, to tourne thein-
selues all at ones, and when neede requires, to make
of the flankes, and of the backe, the fronte, and of the
front, flankes, or backe, whiche is moste easie: because
it suffiseth that every manne doe tourne his bodie, to-
wardes thesame parte that he is commaunded, and
where thei tourne their faces; there the fronte com-
meth to bee. True it is, that when thei tourne to any
of the flankes, the orders tourne out of their propor-
cion: so that from the breast to the backe, there is lit-
tle difference, and from the one flanke to the other,
there is verie moche distance, the whiche is al contra-
rie to the ordinarie order of the battaile: therefore it is
conuenient, that practise, and discretion, doe place the
as thei ought to be: but this is small disorder, so that
moste easely by themselves, thei make remedie it. But
that whiche importeth more, and where is requisite
more practise, is when a battaile would tourne all at
ones, as though it were a whole bodie, here is meete
to haue greate practise, and greate discrecion: because
minding to tourne, as so in sample on the left hande,
the left corner must stande still, and those that be next
to hym that standeth still, muste marche so softly, that
thei that be in the right corner, neede not to runne: o-
therwise all thing should be confounded. But because
it happeneth alwaies, when an armie marcheth from
place to place, that the battailes, whiche are not pla-
ced in the front, shall be dynen to saight not by hedde,
but either by flankes, or by backe, so that a battaile
muste in a sodain change of flankes, or of backe, hedde:
and minding that like battailes in suche case, muste
haue their proportion, as aboue is declared, it is ne-
cessarie, that thei haue the pikes on the same flanke,
that ought to be hedde, and the pikes on the same

curious, and Conestables, to resoꝛte accoꝛdyngly to their places. Wherefoꝛe to mynde to dooe this, in playng them together, you must ordeine the fower scoꝛe rankes, of fve in a ranke, thus: Set all the Pikes in the first twentie rankes, and place the Deticapitaines thereof, fve in the first places, and fve in the last: the other thꝛee scoꝛe rankes, whiche come after, bee all of Targaettes, whiche come to bee thꝛee Centuries. Wherefoꝛe, the first and the laste ranke of euery Centurio, would be Deticapitaines, the Conestable with the Ansigne, and with the Drumme, muste stande in the middelt of the first Centurie of Targaettes, & the Centurions in the hed of euery Centurie. The bande thus ordained, when you would haue the Pikes to come on the left flanke, you must redouble Centurie by Centurie, on the right flanke: if you would haue them to come on the right flanke, you must redouble theim on the lefte. And so this battaile tourneth with the Pikes vpon a flanke, and the Conestable in the middeste: the whiche facion it hath marchyng: but the enemye commyng, and the tyme that it would make of flanke hedde, it nedeth not but to make euery man to tourne his face, to wardes the same flanke, where the Pikes be, and then the battaile tourneth with the rankes, and with the hedges in the same maner, as is aforesaid: so that euery man is in his place, excepte the Centurions, and the Centurions straight wale, and without difficultie, place themselves: But when thei in marchyng, should bee dynen to faght on the backe, it is conuenient to ordein the rankes after such soꝛte, that settynge them in battaile, the Pikes maie come behinde, and to doe this, there is to bee kepte no other order, then where in orderynge the battaile, by the ordinarie, euery Centurie hath fve rankes of Pikes befoꝛe, to cause that thei maie haue them behind, and in all the other partes to obserue the order, whiche I declared firste.

Note to order a band of menne after such a soꝛte that thei maie make their fve againste the enemye of whiche flanke thei list.

Note a band of men oughte to be ordered, whiche in marchyng thei should bee constrained to faght on their backes.

The seconde booke.

Cosmo. You haue tolde (if I dooe well remember me) that this maner of exercise, is to bee able to bypnyng these battailes together into an armie, and that this p;actise, serueth to be able to order theim selues in the same: But if it should happen, that these. CCCC. men, should haue to doe an acte seperate, how would you order them?

Fabricio. He that leadeth them, ought then to iudge, where he will place the Pikes, and there to put them, the whiche doeth not repugne in any part to the order aboue wrytten: so; that also, though thesame bee the maner, that is obserued to faighte a fiede, together with thother battailes, notwithstanding it is a rule, whiche serueth to all those waies, wherein a band of menne should happen to haue to doe: but in shewyng you the other twoo waies of me p;opounded, of ordering the battailes, I shal also satisfie you moze to your question: so; that either thei are neuer vled, or thei are vled when a battaile is a lone, and not in companie of other, and to come to the waie of ordering them, with twoo hornes, I saie, that thou oughteste to order the lxxx. rankes, fise to a ranke, in this maner. Place in the middest, one Centurion, and after hym. xrb. rankes, whiche muste bee with twoo Pikes on the lefte hande, and with thre Targaettes on the right, and after the first fise, there must be put in the twentiefolowynge, twentie Peticapitaines, all betwene the pikes, and the Targaettes, excepte those whiche beare the Pike, who must stand with the Pikes: after these xrb. rankes thus ordered, there is to be placed an other Centurion, and behinde hym fiftene rankes of Targaettes: after these, the Conestable betwene the D; and the Ansigne, who also must haue after him, other fiftene rankes of Targaettes: after this, the thirde Centurion must be placed, and behinde hym, xrb. rankes, in euery one of whiche, ought to bee thre Targaettes on the lefte flanche, and twoo Pikes on the right,

How a battaile
is made with
twoo hornes.

right, and after the fise first rankes, there must be. xx. Betwcapitaines placed betwene the pikers, and the Targaettes: after these rankes, the fowerth Centurion must folowe. Intendynge therfore, of these rankes thus ordered, to make a battaile with two hoynes, the first Centurion must stand still, with the. xxv. rankes whiche be behinde him, after the second Centurion must moue, with the fiftene rankes of Targaettes, that bee behinde hym, and to tourne on the right hande, and by by the right flank of the. xxv. rankes, to go so farre, that he arrive to the. xv. ranke, and there to stande still: after, the Conestable must moue, with the fiftene rankes of Targaettes, whiche be behinde hym, and tournynge likewise on the right hande, by by the right flank of the fiftene rankes, that wer firste moued, must marche so farre, that he come to their heddes, and there to stande still: after, the thirde Centurion must moue with the. xxv. rankes, and with the fowerth Centurion, whiche was behinde, and turnynge by straight, must go a long by the right flank of the fiftene last rankes of the Targaettes, and not to stande still when he is at the heddes of them, but to folowe marchynge so farre, that the laste ranke of the. xxv. make come to be euen with the rankes behinde. And this dooen, the Centurion, whiche was hedde of the firste fiftene rankes of Targaettes, must go awaie from thens where he stode, and go to the backe in the leste cozner: and thus a battaile shall be made of. xxv. rankes, after twentie men to a ranke, with two hoynes, by every side of the frōt, one hoyn, and every one, shall haue ten rankes, fise to a ranke, and there shall remain a space betwene the two hoynes, as moche as containeth ten men, whiche tourne their sides, the one to thother. Betwene the two hoynes, the capitaine shall stande, and on every point of a hoyn, a Centurion: There shall bee also behinde, on every cozner, a Centurion: there shall be two rankes

of

The seconde booke.

The ordering
of a battaile
with a voide
space in the
middeste.

of Pikers, and .xx. Deticapitaines on euery flanke. These twoo hornes, serue to kepe betwene theim the artillerie, when this battaile should haue any withit, and the cariages: The Veliti muste stande a long the flankes, vnder the Pikers. But mindyng to bring this horned battaile, with a voide space in the middeste, there ought no other to bee doon, then of fiftene rankes, of twentie to a ranke, to take eight rankes, and to place them on the pointes of the twoo hornes, whiche then of hornes, become backe of the voide space. In this place, the cariages are kept, the captain standeth, and the Ansigne, but neuer the Artillerie, the whiche is placed either in the front, or a long the flankes. These be the waies, that a battaile maie vse whe it is constrained to passe alone thzough suspected places: notwithstanding, the maine battaile without hornes, and without any soche voide place is better, yet purposyng to assure the disarmed, the same horned battaile is necessarie. The Swizers make also many facions of battailes, among which, thei make one like vnto a crosse: bicause in the spaces that is betwene the armes therof, thei kepe safe their Harkebuters from the daunger of the enemies: but bicause soche battailes be good to faight by theim selues, and my intente is to shew, how many battailes vnited, do faight with the enemye, I wil not labour further in describing the.

Cosmo. My thinks I haue verie well comprehended the waie, that ought to be kept to exercise the me in these battailes: But (if I remember me well) you haue saied, how that besides the tenne battailes, you ioine to the maine battaile, a thousande extraoordinarie Pikers, and fise hundred extraoordinarie Veliti: Will you not appoincte these to be exercised.

Fabritio. I would haue theim to bee exercised, and that with moste great diligence: the Pikers I would exercise, at leaste Ansigne after Ansigne, in the orders of the battailes, as the other: For as moche as these should

Should doe me more seruise, then the ordinarie battal-
les, in all particulare affaires: as to make guides, to
get booties, and to doo like thynges: but the ~~delit~~, I
would exercise at home, wth best bringing them toge-
ther, so; that their office being to saight a sander, it is
not mete, that thei should compare with other, in the
common exercises: so; that it shall suffice, to exer-
cise them well in the particular exercises: I beought
then (as I firste tolde you, no; now me thynke no lar-
dour to rehearse it againe) to cause their men to exer-
cise them selves in these battailes, whereby thei may
knowe how to keepe the rai. to knowe their places,
to tourne quickly, when either enemy, or situation
troubleth them: so; that, when thei knowe how to do
this, the place is after easily learned, which a battaile
hath to keepe, and what is the office thereof in the ar-
mie: and whe a Prince, or a common weale, will take
the paine, and will be their diligence in these orders,
and in these exercising, it shall alwaies happen, that
in their countrie, there shall be good souldiours, and
thei to be superiours to their neighbours, and shalbe
those, whiche shall giue, and not receiue the lawes of
other men: but (as I haue said) the disorder wherof
thei line, maketh that thei neglect, and doe not esteeme
these thynges, and therefore our armies be not good:
and yet though there were either be, or member na-
turally vertuous, thei cannot theue it.

Cosmo. What carriagen would you, that euery
one of these battailes should haue?

Fabris. Firste, I would that neither Centurion,
nor Deticaptain, should be suffered to ride: and if the
Consable would needs ride, I would that he should
haue a Mole, and not a horse. I would allowe byn
twoo carriages, one to euery Centurion, and twoo
to euery three Deticaptaines, so; that so many wer
lodged in a lodgyng, as in the place therof we shall tell
you: so; that euery battaile will come to haue xxxvi.

63389999

h. j. carriages,

To what pur-
pose the y^e lices
and Detice ex-
traordinaire
must serue.

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Neither Cen-
turion nor De-
ticaptaine,
ought not to
ride.

What carria-
ges the Cap-
taine ought
to haue, and the
number of car-
riages requisite
to euery bande
of men.

carriages, the whiche I would should carrie of necessitie the tentes, the vesselles to seeth meate, axes, barres of Iron, sufficient to make the lodnges, and then if thei can carry any other thyng, thei make dooe it at their pleasure.

Cosmo. I beleue that the beddes of you, ordeined in euery one of these battalles, be necessarie: albeist, I would doubt, lest that so many commanders, should confounde all.

Fabius. What should bee, when it were not referred to one man, but referting it, thei cause order, ye and without them, it is impossible to gouerne an armie: so that a wall, whiche on euery parte continually requieth rather to haue many pottes, and thicke, although not so strong, then fewe, though thei were strong: because the death of one alone, doeth not remedie the ruine a farr of. And therefore in tharmies, and among euery ten men, it is conuenient that there bee one, of more life, of more harte, or at leaste wise of more authoritie; who with stomacke, with wordes, and with example, make kepe them constante, and disposed to fight, and these thynges of me declared, bee necessarie in an armie, as the beddes, the Assignes, and the Drummes; is soon that wee haue them all in our armie, but none doeth his office. First to impute that the chiefe capitaines doe the same, for whiche thei are ordeined, it is necessarie (as I haue said) that there be a difference betwene euery one of them and their me, and that thei lodge together, doing their duties, standing in the order with them: so that thei placed in their places, bee a rule and a temperance, to maintaine the rales straight and steele, and it is impossible but that so doo, as doo everyng, doo not reduce themselves quickly into their places. But we note that they doe not use the unto other purpose, then to giue them more wages, then to other purpose, and to cause that thei dooe some particulare service. The same happeneth.

Without many
by capitaines,
an armie cannot
be gouerned.

And therefore
as the
captaine
is the
head
of the
armie
so the
captaine
is the
head
of the
armie
so the
captaine
is the
head
of the
armie

happene the Ansigne bearers, so that they are kept rather to make a faire muster, then for any other warlike vse: but the antiquitie bled them for guides, and to bying them selues againe into order: so that every man, so sone as the Ansigne stonde still, knewe the place, that he kept nere to his Ansigne, wherunto he retourned alwayes: they knewe also, how that the same mouyng, or standyng, that should stalle, or moue: therfore it is necessarie in an armie, that there be many bodies, and every bande of menne to haue his Ansigne, and his guide: wherfore haupng this, it is mete that they haue stomaches enough, and by consequence life enough. When the menne ought to marche, accordyng to the Ansigne: and the Ansigne to moue, accordyng to the Drumme, the whiche Drumme well ordered, commaundeth to the armie, the whiche goyng with paces, that answereth the tyme of the same, will come to kepe easilie the orders: for whiche cause the antiquitie had Schalmes, Flutes, and soundes perfectly tymed: For as moche as like as he that daunseth, paces, ceareth with the tyme of the Musick, and goyng with the same doeth not erre, even so an armie obeyng, in mouyng it self to the same sounde, doeth not disorde: and therefore, they varied the sounde, accordyng as they would varie the motion, and accordyng as they would inflame, or quete, or stalle the mindes of men: and like as the soundes were diuers, so diuersly they named them: the sounde Doxio, in gendered confluence, the sounde Frigio, surie: wherby they saie, that Alexander beyng at the Table, and one soundyng the sounde Frigio, it kened so moche his minde, that he layed hande on his weapons. All these maners should be necessarie to finde againe: and when this should be difficulte, at least there would not be left behind those that teache the souldiour to obte, the whiche every man maye varie, and ordeine after his owne faction, so that with practise, he accustomed the eares of his souldiours

To what purpose Ansignes ought to stalle,

And what purpose Drummes ought to be bled.

For what purpose Drummes ought to be bled.

The properties that soundes of instruments haue in many myndes,

The second booke.

blours to knowe it: But now aduices of this sounte,
there is no other fruite taken for the molle part, then
to make a rumour.

Cosmo. I would desire to vnderstande of you, if e-
uer with your self you haue discoursed, whereof grow-
eth someche bilennesse, and someche disorder, and so
someche negligence in these daies of this creature?

A notable dis-
course of the
author, declar-
ing whereof
groweth so
much bilennes
disorder & negli-
gence in these
daies, concern-
ing the crea-
ture of man.

Fabrizio. With a good will I will tell you the same,
that I thinke. You knowe how that of the excellent
men of warre, there hath been named many in Eu-
rope, fewe in Affric, and lesse in Asia: this groweth, for
that these two laste partes of the worlde, haue had
not past one kyngdome, or two, and fewe common
weales, but Europe onely, hath had many kyngdo-
mes, and infinite common weales, where menne be-
came excellent, and did shewe their vertue, accordyng
as thei were sette a worke, and brought befoze their
prince, or common weale, or king that he be: it follo-
weth therefore, that where be many dominions, there
rise many balaunt menne, and where be fewe, fewe.
In Asia is spande *Sindus*, *Cirus*, *Artaserces*, *Artaxi-*
dates: and verie fewe other, that to these maye be com-
pared. In Affric, is named (lettynge stande the same
ancient *Egypt*) *Masinissa*, *Jugurta*, and those Ca-
pitaines, whiche of the *Carthaginens* common weale
were nourished, whom also in respects to those of Eu-
rope, are moste fewer because in Europe, be excellent
men without number, and so many more should be, if
together with those should be named the other, that
be through the malignitie of time extinct: so that the
worlde, hath been moste vertuous, where hath been
moste states, whiche haue fauoured vertue or necessi-
tie, or for other humane passion. Where rose therefore
in Asia, fewe excellent menne: because the same pro-
vince, was all vnder one kyngdome, in the whiche for
the greater better of, the same standing for the moste
parte of tyme well, there could not growe many in vo-

inges excellent. To Africke there happened the vertie
fame, yet there were nourished moze then in Asia, by
reason of the Carthaginys common weale: so; that in
comon weales, there growe moze excellent men, then
in kingdomes: bicause in comon weales so; he most
part, vertue is honoured, in kyngdomes it is helde
backe: wherby groweth, that in thone, vertuous men
are nourished, in the other thei are extingue. There-
foze he that shall consider the partes of Europe, shall
finde it to haue been full of common weales, and of
pyncedomes, the whiche so; seare, that the one had of
the other, thei wer constrained to kepe liuely the war-
like orders, and to honoz them, whiche in those moste
preuailed: so; that in Grece, besides the kyngdome of
the Macedonians, there were many common weales,
and in euery one of theim, were byed moste excellent
men. In Italie, were the Romaines, the Sannites,
the Toscanes, the Gallie Cisalpine. Fraunce, and Ale-
mainie, wer ful of common weales and pyncedomes.
Spaine likewise: and although in comparison of the
Romaines, there are named fewe other, it groweth
throughe the malignitie of the wyters, whom folowe
fortune, and to theim so; the moste parte it suffised, to
honour the conquerours: but it standeth not with rea-
son, that betwene the Sannites, and the Toscanes,
whom fought. C. l. yeres with the Romaine people,
befoze thei wer overcome, there should not growe ex-
ceedyng many excellent menne. And so likewise in
Fraunce, and in Spaine: but that vertue, whiche the
wyters did not celbryte in particuler menne, thei ce-
lebryted generally in the people, where thei exalte to
the starres, the obstinatnesse that was in theim, to de-
fende their libertie. Weyng then true, that where be
moste dominions, there riseth moste valiaunt menne,
it foloweth of necessitie, that extinguisshyng those, ver-
tue is extingue straighte waie, the occasion decayng
whiche maketh menne vertuous. Therefore, the Ro-

The second booke

maine Empire beyng after increased, and hauing extinguished all the common weales, and principdomes of Europe, and of Africke, and soz the mooste part those of Asia, it leste not any waie to vertue, excepte Rome: whereby greiue, that vertuous menne began to be as fewe in Europe, as in Asia: the whiche vertue, came after to the laste east: For as moche, as all the vertue beyng reduced to Rome, so sone as the same was corrupted, almoste all the worlde came to bee corrupted: and the Scythian people, were able to come to spoile the same Empire, the whiche had extinglished the vertue of other, and knewe not howe to maintaine the same: and after, although thzough the inundation of those barbarous nations, the same Empire was deuided into many partes, this vertue is not renued: The one cause is, soz that it greueth them morche, to take againe the orders when thei are made, the other, because the maner of liuyng now adaiies, hauing respect to the Christian religion, commaundeth not the same necessitie to menne, to defende themselves, whiche in olde tyme was: soz that then, the menne overcome in warre, either were killed, o3 remained perpetuall slaves, where thei led their liues mooste miserably: The townes overcome, either were rased, o3 the inhabitants thereof driven out, their goodes taken auaie, sent dispersed thzough the worlde: so that the vanquished in warre, suffered all extreme miserie: of this feare, men beyng made afrased, thei wer driue to kepe kinely the warlike exercises, and thei honoured so be as were excellent in them: But nowe adaiies, this feare soz the mooste part is not regarded: of those that are overcome, fewe bee killed, none is kepte longe in prison: soz that with facilltie, thei are sette at libertie: the cities also, whiche a thousande tymes haue rebelled, are not destroyed, the men wherof, are let a lone with their goodes, so that the greatestte hurte that is feared, is but a tache: in so morche, that men will not submit them selves

The causes
why the ancient
orders are
neglected.

ues to the orders of warre, and to abide alwaies vnder those, to auoide the perilles whereof thei are little afrayed: again these Prouinces of Europe, be vnder a verie fewe heddes, in respecte as it hath been in times past: for that al Fraunce, obeloth one kyng, al Spaine, an other: Italic is in fewe partes, so that the weake citess, are defended with leanyng to hym that ouercometh, and the strong states, for the causes aforesaid, feare no soche extreme ruine.

Osimo. yet ther hath ben seen many townes that haue ben sacked with in this. xrb. yeres, and lost their dominions, whose insample, ought to teache other how to liue, and to take again some of those old orders.

Fabricio. you sate true: but if you note what townes haue gone to sacke, you shall not finde that thei haue been the heddes of states, but of the members: as was seen sacked Dortona, and not Milaine: Capua, and not Napoles, Bressia, and not Venice, Kanenna, and not Rome: the whiche insamples maketh those that gouerne, not to change their purposes, but rather maketh them to stande more in their opinion, to be able to redeme again all thynges with sakes, and for this, thei will not submit thei selues to the troubles of the exercises of warre, semying vnto them partly not necessarie, partly, an intricate matter, whiche thei vnderstande not: whose other, whiche bee subiectes to them, whomin soche insamples ought to make afrayed, haue no power to remedie it: and those Princes, that haue ones losse thei esteeme, are no more able, & those whiche as yet kepe the, knowe not, nor wil not: Because thei will without any disease rain by fortune, and not by thei vertue: for that in the worlde beyng but little vertue, thei see fortune gouerneth all thynges. And thei will haue it to rule them, not thei to rule it. And to prouethis that I haue discoursed to bee true, consider Almaine, in the whiche, because there is many Princesdomes, and common weales, there is moche

— vertue

The seconde booke

vertue, and all the same, whiche in the present service of warre is good, dependeth of the insamples of those people: who being all gellious of their states, fearing servitude, the which in other places is not feared, thei all maintaine theim selues Lodes, and honourable: this that I haue saied, shall suffice to shewe the occasions of the presente vtilitie, accordyng to my opinion: I cannot tell, whether it seeme the same vnto you, or whether there be growen in you any doubtyng.

Cosmo. None, but rather I vnderstande all herie well: onely I desire tournyng to our principall matter, to vnderstande of you, how you would ordein the hoyses with these battailes, and how many, and how thei should be gouerned, and how armed.

Fabritio. You thinke peradventure, that I haue left it behinde: wherat doe not maruell, for that I purpose for two causes, to speake therof little, the one is, for that the strengthe, and the importance of an armie, is the footemen, the other is, because this part of service of warre, is lesse corrupted, then the same of footemen. For that though it be not stronger then the old, yet it maye compare with the same, neuertheles thei hath been spoken a little afoze, of the maner of exercysing them. And concerning charmingg them, I would arme them as thei doe at this present, as wel the light hoysmen, as the menne of armes: but the light hoysmen, I would that thei should be all Crossebowe shoters, with some Harkebutters among them: the which though in the other affaires of warre, thei bee little profitable, thei be for this most profitable, to make afraied the countrie menne, and to drive them from a passage, that were kept of them: because a Harkebuter, shall scare them moze, then twentie other armed. Yet commyng to the number, I saie, that hauing taken in hand, to imitate the service of warre of the Romans, I would not ordein moze then three hundred hoise, profitable for every maine battaile, of whiche I would

The armyng
of hoysmen.

The weapons
that light hoys-
menne should
have.

The nombre of
hoysmen requir-
ed for a maine
battaile of five
thousand men.

would that there were. **C**L. men of armes, and. **C**L. light hoysmen, and I would giue to euery one of these partes, a hedde, making after among them fiftene peficapitaines for a bande, giuyng to euery one of them a Trompet, and a standarde: I would that euery ten menne of armes, should haue five carriages, and euery ten light hoysmen twoo, the whiche as those of the footemen, should carrie the tentes, the vesselles, and the ares, and the stakes, and the rest of their other harness. For beleue not but that it is disorder, where the menne of armes haue to their seruice sower hoys, because soche a thyng is a corrupt vse: for that the men of armes in Almanie, are seen to bee with their hoys alone, euery twentie of theim, hauyng onely a carte, that carrieth after them their necessary thynges. The Romaine hoysmen, were likewise a lone: true it is, that the Triary lodged nere them, whiche wer bound to minister helpe vnto theim, in the keepyng of their hoyses: the whiche maie easely be imitated of vs, as in the distributyng of the lodgynges, I shall shewe you. The same then that the Romaines did, and that whiche the Duchmen doe now a daies, we maie doe also, ye, not doyng it, we erre. These hoyses ordained and appointed together with a main battaile, maie sometimes be put together, when the battailes bee assembled, and to cause that betwene theim bee made some sight of assault, the whiche should be moze to make the acquainted together, then for any other necessitie. But now of this part, there hath been spoken sufficiently, wheresoze let vs facion the armie, to be able to come into the field against the enemye, and hope to winne it: whiche thyng is the ende, for whiche the exercise of warre is ordeined, and so moche studie therein bestowed.

The nombre of
carriages that
men of armes
and light hoys
men ought to
haue.

The thirde Booke of the arte of warre,
of Nicholas Machianell, Citezeine
and Secretarie of Florence,
vnto Laurence Philip
Strozze.

Cosmo.



Seeing that we chaunge
reasonyng, I will that the de-
maider be chaunged: bicause
I would not be thought pre-
sumptuous, the which I haue
alwaies blamed i other: ther-
foze, I resigne the Dictato-
ship, and giue this authori-
tie to hym that will haue it,

of these my other frendes.

Zanobi. We would be moſte glad, that you ſhould
procede, but ſeyng that you will not, yet tell at leaſte,
whiche of vs ſhall ſuccede in your place.

Cosmo. I will giue this charge to ſignor Fabritio.

Fabritio. I am content to take it, and I will that we
ſolowe the Venecian cuſtome, that is, that the yong-
geſte ſpeake firſte: bicause this beynge an exerciſe for
yong men; I perſwade my ſelf, that yong menne, bee
moſte apt to reaſon thereof, as thei be moſte readie to
execute it.

Cosmo. When it falleth to you Luigi: & as I haue
pleaſure of ſoche a ſucceſſour, ſo you ſhal ſatiſſie your
ſelf of ſoche a demaunder: therfoze I praie you, let vs
tourne to the matter, and let vs leſe no moze tyme.

Fabritio. I am certain, that to mynde to ſhewe wel,
how an armie is prepared, to ſaignt a ſielde, it ſhould
be neceſſarie to declare, how the Grekes, and the Ro-
maines ordeined the bandes of their armies: Not
with

Withstandyng, you your selues, beeyng able to rede,
and to consider these thynges, by meanes of the aun-
cient wryters, I will passe ouer many particulars: and
I will onely byyng in those thynges, whiche I thinke
necessarie to imitate, myndyng at this tyme, to giue
to our exercise of warre, some parte of perfection:
The whiche shall make, that in one instante, I shall
shewe you, how an armie is prepared to the field, and
how it doeth incounter in the verie saight, and how it
maie be exercised in the fained. The greatestt disorder,
that thei make, whiche ordeine an armie to the fiede,
is in giuing them onely one fronte, and to binde them
to one byunt, and to one fortune: the whiche groweth,
of haunyng losse the waie, that the antiquitie vsed to
receiue one bande within an other: bicause without
this waie, thei can neiether succour the sozmoſte, noz
defende them, noz succede in the saight in their neede:
the whiche of the Romaines, was moſte excellently
well obserued. Therefore, purposyng to shewe this
waie, I saie, how that the Romaines deuised into. iij.
partes euery Legion, in Hastati, Præncipi, and Tri-
arij, of which, the Hastati wer placed in the first front,
oz sozward of the armie, with thozders thicke & sure,
behinde whō wer the Præncipi, but placed with their
ordres moze thinne: after these, thei set the Triarij, &
with so moche thinnes of ordres, y thei might, if neede
wer, receiue betwene them the Præncipi, and the Ha-
stati. Thei had besides these, the Slingers, and Cros-
bowshoters, and the other lighte armed, the whiche
stoode not in these ordres, but thei placed them in the
hed of thar mie, betwene the hozses and the other ban-
des of footemen: therefore these light armed, began
the saight, if thei ouercame (whiche happened seldom
times) thei folowed the victorie: if thei were repulced,
thei retired by the flankes of the armie, oz by the spa-
ces ordained for soche purposes, and thei brought the
selues among the vnarmed: after y departure of whō,

The greatestt
disorder that is
vsed now a da-
ies in pitching
of a fiede,

The order how
a Romain Les-
gion was ap-
pounded to
saight,

The thirde booke.

the Hastati incountered with the enemye, the whiche if thei saw themselves to be overcome, thei retired by a little and little, by the rarenesse of the orders betwene the Principi, and together with those, thei renewed the fight: if these also were repulced, thei retired al in the rarenesse of the orders of the Triary, and al together on a heape, began againe the fight: and then, if thei were overcome, there was no moze remedie, because there remained no moze waies to renewe them againe. The horses stood on the corners of the armie, to the likenes of twoo winges to a bodie, & sometwiles thei fought with the enemies horses, an other while, thei rescued the footmen, according as neede required. This waie of renewing thei selves thre tymes, is almoste impossible to overcome: so that, fortune muste thre tymes forsake thee, and the enemye to have so moche strengthe, that thre tymes he maye overcome thee. The Grekes, had not in their Falangi, this maner of renewing them selves, and although in those were many heddes, and many orders, notwithstanding, thei made one bodie, or els one hedde: the maner that thei kepte in rescuing the one the other was, not to retire the one order within the other, as the Romaines, but to enter the one manne into the place of the other: the which thei did in this maner. Their Falage brought into ranks, and aduint, that thei put in a ranke fiftie menne, coming after with their hedde againste the enemye, of all the ranks the foremoste are, mighte fight: Because their Launces, the whiche thei called *Parisse*, were so long, that the first ranke, passed with the hedde of their Launces, out of the first ranke: then in fighting, if any of the first, either through death, or through woundes fell, straight waie there entered into his place, the same man, that was behinde in the second ranke, and in the place that remained boide of the seconde, the same man entered, whiche was behind hym in the thirde, and thus successively, in a sodaine the

The maner
that the Gre-
kes used in
their Falangi,
wherethei fought
against their
enemies.

the rankes behinde, restozed the faultes of those afore,
so that the rankes alwaies remained whole, and no
place of the saighters was bolde, except the laste ran-
kes, the whiche came to consume, haupng not menne
behinde their backes, whom might restoze theim: So
that the horte that the first rankes suffered, consumed
the laste, and the firste remained alwaies whole: and
thus these Falangi by their order, might soner be co-
sumed, then broken, so that the grosse bodie, made it
moze immouable. The Romaines vsed at the begin-
nyng the Falangi, & did set in order their Legiōs like
vnto them: after, this order pleased them not, and thei
decided the Legiōs into many bodies, that is, in bā-
des and companies: Because thei iudged (as a little a-
foze I saied) that the same bodie, should haue neede of
many capitaines, and that it should be made of sundre
rie partes, so that every one by it self, might be gover-
ned. The maine battailes of the Swizzers, vse at this
presents, all the maners of the Falangi, as well in o-
dyng it grosse, and whole, as in rescuyng the one the
other: and in pitchyng the field, thei set the main bat-
tailes, thone to the sides of the other: and though thei
set them the one behinde the other, thei haue no waie,
that the firste retruyng it self, maie bee receiued of the
seconde, but thei vse this order, to the entent to bee a-
ble to succour the one thother, where thei put a maine
battaile befoze, and an other behinde the same on the
right hande: so that if the first haue neede of helpe, that
then the other maie make soze warde, and succour it:
the third main battaile, thei put behind these, but di-
stant from the, a Harkebus shot: this thei doe, so that
thesaid two main battailes being repulced, this maie
make sozwarde, and haue space soz theim selues, and
soz the repulced, and the same that marcheth sozward,
to auoide the iustling of the one the other: soz as moche
as a grosse multitude, cannot bee receiued as a little
bodie: and therefore, the little bodies beyng destitute,

The order that
the Swizzers
vse in their
main battailes
whē thei saight

The thirde booke.

Whiche were in a Romaine Legion, might be placed in ſoche wiſe, that thei might receiue betwene theim, and reſcue the one the other. And to proue this order of the Swiſſers not to be ſo good, as the auncient Romaines, many inſamples of the Romain Legions doe declare, when thei fought with the Grekes Falangi, where alwaies thei were conſumed of theim: ſo; that the kinde of their weapons (as I haue ſaid afoze) and this waie of renoungthemiſelues, could do moze, then the maſſiuenelle of the Falangi. Hauing therfoze, with theſe inſamples to ordaine an armie, I haue thought good, partly to retaine the maner of armynge and the orders of the Grekes Falangi, and partly of the Romain Legions: and therfoze I haue ſaid, that I would haue in a main battaile, two thouſande pikes, whiche be the weapons of the Macedonick Falangi, and three thouſande Targaettes with ſwordes, whiche be the Romain weapons: I haue deuised the main battaile, into .x. battalles, as the Romaines their Legion into ten Cohortes: I haue ordeined the Veliti, that is the light armed, to begin the ſaigt, as the Romaines vſed: and like as the weapons beynge mingled, doe participate of thone and of the other nation, ſo the orders alſo doe participate: I haue ordeined, that euery battaile ſhall haue v. rankes of pikes in the fronte, and the reſt of Targaettes, to be able with the front, to withſtande the hozes, and to enter eaſely into the battaile of the enemies on foot, hauing in the firſte fronte, or barwarde, pikes, as well as the enemy, the whiche ſhall ſuffice me to withſtande the, the Targaettes after to overcome theim. And if you note the vertue of this order, you ſhal ſee al theſe weapons, to doe fully their office, ſo; that the pikes, be profitable againſt the hozes, & whē thei come againſt the footemenne, thei dooe their office well, befoze the ſaigt thong together, becauſe ſo ſone as thei preſſe together, thei become vnprofitable: wherefoze, the

Swiſſers

Howe to appointe a main battaile with armour & weapons, and to order the ſame after the Greke & Romain maner

Souldiers to auoide this inconuenience, put after euery thre rankes of Pikers, a ranke of Halberdes, the whiche thei doe to make roome to the Pikers, whiche is not yet so moche as suffiseth. When putting our pikers afoze, and the Targaettes behinde, thei come to with stande the hozses, and in the beginnyng of the faight, thei opone the rates, and moleste the footemenne: But when the faight is thrust together, and that thei become vnprofitable, the Targaettes and swerdes succede, whiche made in euery narowe place be handled.

Luigi. We loke now with desire to vnderstande, how you would ordein the armie to faight the felde, with these weapons, and with these ordere.

Fabricio. And I will not now shewe you other, then this: you haue to vnderstande, how that in an ordinarie Romaine armie, whiche thei call a Consull armie, there were no more, then two Legions of Romaine Citezeins, whiche were sixe hundred hozse, and about a leuen thousande footemen: thei had besides as many mo footemen and hozsemen, whiche were sente thent from their friends and confiderates, whom thei diuided into two partes, & called the one, the right hozne and the other the left hozne: no: thei neuer permitted, that these aidyng footemen, should passe the number of the footemen of their Legions, thei were well contented, that the number of those hozse, should be more then theirs: with this armie, which was of xxiij. thousande footemen, and about two thousande good hozse, a Consull executed all affaires, and went to all enterprises: yet when it was nedefull to set against a greater force, two Consulles ioined together with two armies. You ought also to note in especially, that in all the thre principall actes, whiche an armie doeth, that is, to marche, to incampe, and to faight, the Romaines vsed to put their Legions in the middeste, so that thei would, that the same power, wherein thei moste trusted, should be moste united, as in the reasonyng

The nombre of men that was in a Consullian armie.

Howe the Romaines placed their Legions in the felde.

The thirde booke

sonyng of these three actes, shall be shewed you: those
asoyng footemen, thzough the practise thei had with
the Legion Souldiours, were as profitable, as thei, bi-
cause thei were instructed, accoꝝdyng as the scultours
of the Legions were, and therfoze, in like maner in
pitching the field, thei pitched. Then, he that knoweth
how the Romaines disposed a Legion in their armie,
to fight a fiede, knoweth how thei disposed all: ther-
foze, haunyng tolde you, how thei deuised a Legion in-
to thze bandes, and how the one bande receiued the
other, I haue then told you, how al tharmie in a fiede,
was ordained. Wherfoze, I minding to ordain a fiede
like vnto the Romaines, as thei had twoo Legions,
I will take. ij. main battailes, & these beyng disposed,
the disposicion of all an armie shalbe vnderstode ther-
by: bicause in soyngng moze men, there is no other to
be doen, then to ingrosse the orders: I think I neede not
to rehearse how many men a main battaile hath, and
how it hath tenne battailes, and what heddes bee in a
battaile, and what weapons thei haue, and whiche be
the ordinarie Pikes and Meliti, and whiche the extra-
ordinarie: so; that a little asoze I tolde you it distinct-
ly, and I willed you to kepe it in memoꝝte, as a neces-
sarie thing to purpose, to vnderstande all the other or-
ders: and therfoze I will come to the demonstracion
of the order, without repeatyng it any moze: He thin-
kes good, that the ten battailes of one main battaile,
be set on the left flank, and the tenne other, of the o-
ther main battaile, on the right: these that are placed
on the left flank, be ordeined in this maner, there is
put fve battaile, the one to the side of the other in the
fronte, after soche soꝝte, that betwene the one and the
other, there remaine a space of thze yardes, whiche
come to occupie so; largenesse. Cvi. yardes of ground,
and so; length thirtie: behinde these fve battailes, I
would put thze other, distante by right line from the
firre, thirtie yardes: twoo of the whiche, should come
behinde

How to order
an army in the
fiede to fight
a battaile, accoꝝ-
dyng to the
mynde of the
authour.

behinde by right line, to the uttermoste of the flue, and the other should kepe the space in the middesse, and so these thre, shall come to occupie for bredth and length, as moche space, as the flue doeth. But where the flue haue betwene the one, and the other, a distance of thre yardes, these shall haue a distance of. xvj. yardes. After these, I would place the two last battailes, in like maner behinde the thre by right line, and distance from those thre, thirtie yardes, and I would place eche of them, behinde the uttermoste part of the thre, so that the space, whiche should remain betwene the one and the other, should be. lxxij. yardes: then all these battailes thus ordered, will take in bredth. Cvi. yardes, and in length. CL. Thertraordinarie Pikemen, I would bestende a long the flanches of these battailes, on the left side, distante from them fiftene yardes, making. Cxij. rankes, seven to a ranke, after soche sorte, that thei maie impale with their length, all the left side of the tenne battailes in the same wise, declared of me to be ordained: and there shall remain fourtie rankes to keepe the carrriages, and the unarmed, whiche ought to remaine in the taile of the armie, distributing the Deticapitanes, and the Centurions, in their places: and of the thre Constables, I would place one in the hedde, the other in the middesse, the third in the laste ranke, the whiche should execute the office of a Tergiduttore, whom the antiquitie so called hym, that was appointed to the backe of the armie. But retournyng to the hedde of the armie, I saie how that I would place nere to the extraordinarie pikemen, the Clisset extraordinarie, whiche you knowe to be five hundred, and I would give them a space of. xvj. yardes: on the side of these likewise on the left hande, I would place the menne of armes, and I would thei should haue a space of. Cxij. yardes: after these, the light horsemen, to whom I would appoint as moche ground to stande in, as the menne of armes haue: the

How the extra-
ordinary pikemen
be placed in
the first battaile.

The place
where the extra-
ordinarie pikemen
and harque-
bushers, and
the men of ar-
mes and light
horsemen ought
to stande when
the field is pre-
pared, and goeth
to fight the
battaile.

The hirde booke.

The ordinarie
archers & hars
rebuttere are
placed aboute
their owne bat-
tailes.

The place
where the gene-
rall hedde of a
maine battaile
muste stande,
when the same
power of men
is appointed
to faght.

What men
a general capt-
ain of a maine
battaile oughte
to haue aboute
hym.

The place
where a general
captaine of all
the armie must
stand when the
battaile is read-
dy to be fought
and what nom-
ber of chosen
men oughte to
be aboute hym.

ordinarie belitti, I would leaue about their owne bat-
tailes, who should stand in those spaces, whiche I ap-
pointe betwene thone battaile & thother: who should
be as their ministers, if sometyme I thought not good
to place them vnder the extraordinarie Wykes: in doo-
yng or not dooing wherof, I would procede, accor-
dyng as should tourne best to my purpose. The gene-
rall hedde of all the maine battaile, I would place in
thesame space, that were betwene the first and the se-
conde order of the battailes, or els in the hedde, and in
thesame space, that is betwene the laste battaile of the
firste fise, and the extraordinarie Wykes, accor-
dyng as best should serue my purpose, with thirtie or fouertie
chosen men about hym, that knewe by prudence, how
to execute a commission, and by force, to withstande a
violence, and thei to be also betwene the Drumme and
the Ansigne: this is the order, with the whiche I would
dispose a maine battaile, whiche should bee the dispo-
syng of halfe the armie, and it should take in breadth
thre hundred fourscore and twoo yardes, & in length
as moche as aboue is saied, not accomptyng the space,
that thesame parte of the extraordinarie Wykes will
take, whiche muste make a defence for the vnarmed,
whiche will bee aboute. lxxv. yardes: the other maine
battaile, I would dispose on the righte side, after the
same maner iuste, as I haue disposed that on the left,
leauyng betwene the one main battaile, and thother,
a space of. rrrj. yardes: in the hedde of whiche space, I
would set some little carriages of artillerie, behynde
the whiche, should stande the generall capitaine of all
the armie, and should haue about hym with the Wef-
pet, and with the Capitaine standerde, twoo hundred
menne at least, chosen to be on foote the moste parte,
amongest whiche there should be tenne or moze, mete
to execute all commaundementes, and should bee in
soche wise a horsebacke, and armed, that thei mighte
bee on horsebacks, and on foote, accor-
dyng as needs
should

should require. The artillerie of the armie, sufficeth
tenne Cannons, for the winnyng of Tounes, whose
shotte should not passe fiftie ponde: the whiche in the
fielde, should serue me moze for defence of the campe,
then for to saight the battaile: The other artillerie,
should bee rather of tenne, then of fiftene ponde the
shotte: this I would place afoze on the fronte of al the
armie, if sometyme the countrie should not stande in
soche wise, that I mighte place it by the flankes in a
sure place, where it might not of the enemye be in da-
nger: this facio of an armie thus ordred, made in saigh-
ting, vse the order of the Falangi, and the order of the
Romain Legions: so that in the fronte, be pikers, all
the menne bee set in the rankes, after soche sorte, that
in counterpyng with the enemye, & withstanding him,
made after the vse of the Falangi, restore the first ran-
kes, with those behinde: on the other parte, if thei bee
charged so soze, that thei be constrained to breake the
orders, and to retire themselves, thei made enter into
the holde places of the seconde battalles, whiche thei
haue behinde them, and vnite their selues with them,
and makynge a newe force, withstand the enemye, and
ouercome hym: and when this sufficeth not, thei made
in the verie same maner, retire themselves the second
tyme, and the thirde saight: so that in this order, con-
cernyng to saight, there is to renew themselves, both
accoording to the Greke maner, and accoordyng to the
Romaine: concernyng the strength of tharmie, there
cannot be ordained a moze stronger: so as moche, as
the one and the other hoine thereof, is exceedingly wel
replenished, bothe with beddes and weapōs, no; there
remaineth weake, other then the parte behinde of the
barned, and the same also, hath the flankes impa-
led with the extraordinarie pikers: no; the enemye ca-
not of any parte assaulte it, where he shall not finde it
well appointed, and the hinder part cannot be assaul-
ted: Because there cannot bee an enemye, that hath so

How many cas-
nons is requi-
red for an army
and of what
size they ought
to bee.

Where the ar-
tillerie oughte
to bee placed,
when tharmy is
ready to saight.

An armie that
is ordered as
above is declar-
ed, made in
saighing, be-
the Greke ma-
ner, and the Ro-
maine facion,

For what pur-
pose the spaces
that be between
every bande of
men doe serve.

The spaces
between the
battails and
orders.

To what pur-
pose the spaces
that be between
every bande of
men doe serve.

moche puissance, whom equally male assault thee on
every side: for that he haupng so greate a power, thou
mightest not then to matche thy self in the fildes with
him: but when he were thre tymes moze then thou,
and as well appointed as thou, he doeth weaken him
self in assaultyng thee in diuers places, one part that
thou beakest, will cause all the reste goe to nought:
concerning horses, although he chaunce to haue moze
then thine, thou needest not to feare: for that the orders
of the wikes, whiche impale thee, defende thee from
all violence of them, although thy horses were repu-
sed. The heddes besides this, be disposed in such place,
that they maie easely commaunde, and obeye: the spa-
ces that bee betwene the one battaile, and the other,
and betwene the one order, and the other, not onely
serue to bee able to receiue the one the other, but also
to giue place to the messengers, whiche should go and
come by order of the capitaine. And as I told you first,
how the Romaines had for an armie, aboute fower
and twentie thousande menne, euen so this ought to
bee: and as the other souldiours tooke insample of the
Regions, for the maner of fighityng, and the facion
of tharmie, so those souldiours, which you should ioyne
to our twoo maine battailes, ought to take the forme
and order of them: wherof haupng put you an insam-
ple, it is an easie matter to imitate it, for that increa-
syng, either twoo other maine battailes vnto the ar-
mie, or as many other souldiours, as they bee, there is
no other to bee dooen, then to double the orders, and
where was put tenne battailes on the lefte parte, to
put twentie, either ingrossyng, or distendyng the or-
ders, accordyng as the place, or the enemye should
compell thee.

Luigi. Surely sir I imagine in soche wise of this
armie, that me thinkes I now se it, and I burne with
a desire to se it incounter, and I would for nothing in
the world, that you should become Fabius Maximus
intendyng

Intendynge to kepe the enemye at a bayle, and to deserue the date of battaile: because I would saue woyle of you, then the Roman people saued of hym.

Fabritio. Doubt not: Doe you not heare the artillerie: Our haue alredie shotte, but little hurte the enemye: and the extraordinary Meliti, issuing out of their places together with the light horsemen, moste speedely, and with moste merueilous furie, and greatest crie that maie be, thei assaulte the enemye: whose artillerie hath discharged ones, and hath passed ouer the heddes of our footemen, without doyng the any hurt, and because it cannot shoote the seconde tyme, the Meliti, and our horsemen, haue nowe gotten it, and the enemies so; to defende it, are come so;e warde, so that neither our ordinaunce, nor the enemies, can any more doe their office. See with how moche vertue, strengthe and agilitie our men fighteth, and with how moche knowledge through the exercise, whiche hath made them to abide, and by the confidence, that thei haue in the armie, the whiche, see, how with the pace therof, and with the men of armes on the sides, it marcheth in good order, to geue the charge on the aduersaries: See our artillerie, whiche to geue thei place, and to leaue them the space free, is retired by the same space, from whens the Meliti issued: See how the capitaine encourageth them, sheweth them the victorie certain: See how the Meliti and light horsemen bee enlarged, and returned on the flanches of tharmie, to seke and view, if thei maie by the flank, doe any insurie to the aduersaries: behold how the armie be affronted. See with how moche ballastnesse thei haue withstode the violence of the enemies, & with how moche silence, and how the capitaine commandeth the menne of armes, that thei sustain, and not charge, and that thei bryake not from the order of the footemen: see how our light horsemen be gone, to geue the charge on a band of the enemies Harkebutters, whiche would haue hurt our

The description
on of a battail
that is a faih
tyng.

The thirde booke.

men by flanche, and how the enemies horse haue succoured them, so that tourned betwene the one and the other horse, thei cannot shoote, but are faine to retire behinde their olde battails: see with what furie our pikes doe also affront, and how the footemen be now so nere together the one to the other, that the pikes can no more be occupied: so that according to the knowledge learned of vs, our pikes do retire a little & a little betwene the targaettes. See how in this while a great bande of men of armes of the enemies, haue charged our men of armes on the leste side, and how ours, according to knowledge, bee retired vnder the extraordinary pikes, and with the help of those, giuing again a frethe charge, haue repulced the aduersaries, & slain a good part of them: in so moche, that the ordinary pikes of the first battalles, be hidden betwene the raies of the Targaettes, thei hauing leste the saight to the Targaet men: whom you maie see, with how moche vertue, securitie, and leasure, thei kill the enemy: see you not how moche by saighting, the orders be thrust together: What thei can safe welde their swardest? Behold with how moche furie the enemies moue: because beyng armed with the pike, and with the sword vnprofitable (the one for beyng to long, the other for finding the enemy to well armed) in part thei fall hurt or dedde, in parte thei sle. See, thei sle on the righte corner, thei sle also on the leste: behold, the victorie is ours. Haue not we wonne a field moste happely? But with moze happinesse it should bee wonne, if it were graunted me to put it in acte. And see, how there needed not the helpe of the seconde, nor of the third order, for our first fronte hath sufficed to overcome theim: in this part, I haue no other to saie vnto you, then to resolve if any doubt be growen you.

Luigi. You haue with so moche furie wonne this fiede, that I so moche meruaile and am so astonied, that I beleue that I am not able to expresse, if any doubt

doubt remain in my mynde: yet trusting in your prudence; I will be so bolde to tell the same that I vnderstande. Tell me firste, why made you not your ordinaunce to shoothe more then ones? And why straightwaile you made them to retire into tharmie, no; after made no mention of them? He thought also, that you leueled the artillerie of the enemye high, & appointed it after your owne deuise: the whiche might very well bee, yet when it should happen, as I beleue it chaunceth often, that they strike the ranks, what remedie haue you? And seying that I haue begun of the artillerie, I will finish all this question, to the intente I neede not to reason therof any more. I haue heard many dispraise the armours, and the orders of the aunciente armies, arguyng, how now a daies, they can doe little, but rather should bee altogether vnprofitable, hauyng respecte to the furie of the artillerie: bicause, this breaketh the orders, and passeth the armours in soche wise, that it semeth vnto them a foolishnesse to make an order, whiche cannot bee kepte, and to take pain to beare a harness, that cannot defende a man.

Fabrizio. This question of yours (bicause it hath many heddes) hath neede of a long aunswere. It is true, that I made not thattillery to shoothe more then ones, and also of the same ones, I stood in doubte: the occasion was, so; as moche as it importeth more, so; one to take heed not to be striken, then it importeth to strike the enemye. You haue to vnderstande, that to purpose that a pece of ordinaunce hurt you not, it is necessarie either to stande where it cannot reche you, or to get behinde a wall, or behinde a banke: other thing there is not that can withholde it: and it is needefull also, that the one and the other be mooste strong. Those capitaines whiche come to fight a field, cannot stand behinde a wal, or behinde bankes, no; where they shal not be reached: they are so; met so; them, seying they cannot finde a waie to defende the, so; finde some mean,

Questions concerning the shoyng of ordinaunce.

An aunswere to the questions that were demanded, concerning the shoyng of ordinaunce.

The thirde booke

by the whiche thei mase be least hurte: no: thei cannot finde any other wale, then to pzeuente it quickly: the wale to pzeuent it, is to go to finde it out of hande, and hastely, not at leasure and in a heape: so: that thzough speede, the blowe is not suffered to bee redoubled, and by the thinnesse, lesse number of menne mase be hurt. This, a bande of menne ordered, cannot dooe: bicause if the same marche hastely, it go weth out of order: if it go scattered, the enemye shall haue no paine to bzeake it, so: that it breaketh by it self: and therfore, I ordered the armie after soche sozte, that it might dooe the one thyng and the other: so: as moche as hauyng set in the corners thereof, a thousande Meliti, I appointed that after that our ordinaunce had shotte, thei should issue out together with the light hoysmen, to get the enemies artillerie: and therfore, I made not my ordinaunce to shoote again, to the intente, to giue no tyme to the enemye to shoote: Bicause space could not be giuen to me, and taken from other men, and so: the same occasion, where I made my ordinaunce not to shoote the seconde tyme, was so: that I would not haue suffered the enemye to haue shot at al, if I had could: seying that to mynde that the enemies artillerie be vnpozable, there is no other remedie, but to assaulte it speedely: so: as moche as if the enemies so: take it, thou take it, if thei will defende it, it is requisite that thei leaue it behind, so that being possessed of enemies, and of frendes, it cannot shoote. I would beleue, that without insamples these reasons should suffice you, yet being able to shewe olde ensamples, to proue my saynges true, I will. Mentidio commyng to saight a field with the Parthians, whose strength so: the moste part, consisted in bolpes and arrowes, he suffered thein almoste to come harde to his campe, befoze he dzeue out his armie, the whiche onely he did, to be able quickly to pzeuent them: and not to giue them space to shoote. Cesar when he was in Fraunce, maketh mencion, that

The best remedie to auoide the hurte that the enemye in the fild mase doe with his ordinaunce.

A policie against bolpes and darts.

that in faighting a battaile with the enemies, he was with so moche furie assaulted of them, that his menne had no time to whoyle their Dartes, accoꝝdyng to the custome of the Romaines: wherfoꝛe it is seen, that to intende, that a thyng that shooteth farre of, beyng in the field, doe not hurte thee, there is no other remedy, then with as moche celeritie as maie bee, to pꝛeuent it. An other cause moued me to pꝛocede, without shooꝛtyng the oꝛdinaunce, whereat peradventure you will laugh: yet I iudge not that it is to be dyspraised. Ther is no thyng that causeth greater confusio in an armie, then to binder mennes sightes: whereby many moste pꝛaisaunte armies haue been broken, by meanes their sighte hath been letteth, either with duste, oꝛ with the Sunne: yet there is nothyng, that moze letteth the sight, then the smoke that the artillerie maketh in shooꝛtyng: therfoꝛe, I would thinke that it wer moze wise, home, to suffer the enemye to blinde hymself, then to purpose (thou beyng blind) to go to finde hym: foꝛ this cause, either I would not shote, oꝛ (foꝛ that this should not be pꝛoued, considering the reputacion that the artillerie hath) I would place it on the corners of the armie, so that shooꝛtyng, it should not with the smoke thereof, blinde the front of the same, whiche is the impꝛtaunce of my men. And to pꝛoue that it is a pꝛofitable thyng, to let the sight of the enemye, there maie be brought foꝛ insample Epaminondas, who to blind the enemies armie, whiche came to faight with hym, he caused his light horsemen, to run befoꝛe the fronte of the enemies, to raise by the duste, and to lette their sight, whereby he gotte the victoꝛie. And where it seemeth vnto you, that I haue gulded the shot of the artillerie, after my owne deuise, making it to passe ouer the heddes of my men, I answer you, that most often tymes, and without coꝛparison, the greates oꝛdinaunce misse the footemen, moche soner then hitte theim: foꝛ that the footemen are so lowe, and those so difficult to

nothyng causeth greater confusion in an armie, than to binder mennes sightes.

nothing moze blindeth the sight of men in an armie, then the smoke of oꝛdinaunce.

A policie to trouble the enemies sight.

The shotte of greates oꝛdinaunce in the felde, is not moche to be feared of footemen.

The hirde booke.

Because menne
of armes stand
closer together
then light horse-
men, thei ought
to remaine be-
hind the armie
ill the enemies
ordinaunce haue
been shootyng.

Shoote, that every little that thou raisest theim, thei
passe ouer the heddes of men: and if thei be leueled ne-
uer so little to lowe, thei strike in the pearth, and the
blow cometh not to theim: also the vneuentnesse of the
grounde saueith them, so; that every little hillocke, or
high place that is, betwene the men and the ordinaunce,
letteth the shot therof. And concernyng horsemen, and
in especially men of armes, because thei ought to stand
moze close together, then the light horsemen, and so;
that thei are moche higher, make the better be stroke,
thei maie, vntill the artillerie haue shotte, be kepte in
the taile of the armie. True it is, that the Harkebut-
ters doe moche moze hurt, and the field peeces, then the
greate ordinaunce, so; the whiche, the greatest remedy
is, to come to hande strokes quickly: and if in the firste
assaulte, there be slaine some, alwaies there shall bee
slaine: but a good capitaine, and a good armie, ought
not to make a cōmpte of a hurte, that is partikulare,
but of a generall, and to imitate the Sufferers, whom
never eschue to faight, beyng made afraied of the ar-
tillerie: but rather punish with death those, whiche
so; feare thereof, either should go out of the ranke, or
should make with his body any signe of feare. I made
them (so sone as thei had shotte) to bee retired into the
armie, that thei might leaue the waie free so; the bat-
taile: I made no moze mencion of theim, as of a thyng
vnpofitable, the faight beyng begun. You haue also
saied, that consideryng the violence of this instrumēt,
many iudge the armours, and the auncient orders to
be to no purpose, and it semeth by this your talke, that
men now a daies, haue founde orders and armours,
whiche are able to defend them against the artillerie:
if you knowe this, I would bee glad that you would
teache it me: so; that hetherto, I neuer sawe any, nor
I beleue that there can any be founde: so that I would
vnderstande of soche men, so; what cause the souldi-
ours on foote in these daies, weare the breastplate, or
the

the corselet of Steele, and thei on horsebacke go all armed: bicause seying that thei blame the aunciente arming of men as vnprofitable, considryng the artillery, thei ought to despise also this: I would vnderstande moreouer, for what occasion the Switzers, like vnto the auncient orders, make a battaile close together of fire, or eight thousande menne, and for what occasion all other haue imitated theim, this order bearyng the verie same perill, concernyng the artillerie, that those other should beare, whiche should imitate the antiquitie. I beleue thei should not knowe what to answer: but if you should aske soche souldiours, as had some iudgement, thei would aunswere first, that thei go armed, for that though the same armour defende theim not from the artillerie: it defendeth them from crossbowes, from pikes, from sweardes, from stones, and from all other hurt, that cometh from the enemies, thei would answer also, that thei wet close together, like the Switzers, to be able more easely to ouerthrow the footemen, to be able to withstand better the horse and to giue more difficultie to the enemy to breake the: so that it is seen, that the souldiours haue to feare many other thynges besides the ordinance: fro which thynges, with the armours, and with the orders, thei are defended: whereof soloweth, that the better that an armie is armed, and the closer that it hath the orders, and stronger, so moche the surer it is: so that he that is of the same opinion, that you saie, it behoueth either that he bee of small wisdome, or that in this thyng, he hath studied verie little: for as moche as if we see, that so little a parte of the aunciente maner of arming, whiche is vsed now a daies, that is the pike, and so little a parte of those orders, as are the maine battailes of the Switzers, dooe vs so moche good, and cause our armies to bee so strong, why ought not we to beleue, that the other armours, and the other orders whiche are lefte, be profitable: seying that if we haue

The thirde booke.

no regard to the artillerie, in puttynge our selues close together, as the Swizzers, what other orders make vs moze to feare thesame: For as moche as no order can cause vs so moche to feare thesame, as those, whiche byng men together. Besides this, if the artillerie of the enemies should not make me afrated, in besieging a Towne, where it hurteth me with moze safegarde, being defended of a wall, & being not able to puenente it, but onely with tyme, with my artillerie to lette it, after soche sorte that it make double the blowe as it liste, why should I feare thesame in the field, where I make quickly puenent it: So that I conclude thus, that the artillerie, according to my opinio, doeth not let, that the aunciente maners cannot be vsed, and to shewe the auncient vertue: and if I had not talked already with you of this instrument, I would of thesame, declare vnto you moze at length: but I will remit my self to that, whiche then I sated.

The artillerie
is no let, why
the auncient or
ders of warfar
ought not to be
vsed in these
daies.

Luigi. Wee make now vnderstande verie well, how moche you haue aboute the artillerie discoursed: and in conclusion, my thinkes you haue shewed, that the puenētyng it quickly, is the greatest remedie, that make be had for thesame, being in the filde, and haupng an armie againste you. Upon the whiche there groweth in me a doubt: bicause me thinkes, that the enemy might place his ordinaunce in soche wise, in his armie, that it should hurt you, and should be after soche sort garded of the footemen, that it could not be puenēted. You haue (if you remēber your self well) in the orderyng of your armie to faight, made distaunces of thye yardes, betwene the one battaile & the other, making those distaunces fiftene, whiche is from the battailes, to the extraordinary pikes: if the enemy, should order his armie like vnto yours, and should putte the artillerie a good wate within those spaces, I beleue that from thens, it should hurte you with their moste greates safegard: bicause menne can not enter into the

force of their enemies to prevent it.

Fabrisia. You doubt moste prudently, and I will devise with my self, either to resolve you the doubt, or the way you the remedie: I have tolde you, that continually these battailes, either through goyng, or thorough faightyng, are mouyng, and alwaies naturally, thei come to dyuise harde together, so that if you make the distaunces of a small breadth, where you set the artillerie, in a little tyme thei be shootte vp, after soche sort, that the artillerie cannot any moze shoot: if you make theim large, to auoide this perill, you incur into a greater, where you through those distaunces, not onely giue commoditie to the enemye, to take fro you the artillerie, but to breake you: but you haue to vnderstande, that it is impossible to keepe the artillerie betwene the bandes, and in especially those whiche go on carriages: For that the artillerie goeth one waye, and shooteth an other waye: So that hauyng to go and to shoot, it is necessary, befoze thei shote, that thei tourne, and so to tourne theim, thei will haue so moche space, that fiftie cartes of artillerie, would disorder any armie: therfore, it is mete to keepe the out of the bandes, where thei may be ouercome in the maner, as a little afoze we haue shewed: but admit thei might be kept, and that there might be found a waye between bothe, & of soche condicion, that the presyng together, of men should not hinder the artillerie, and were not so open that it should giue waye to the enemye, I saie, that it is remedied moste easely, with makyng distaunces in thy armie against it, whiche may giue free passage to the shot of those, & so the violence thereof shall come to be vain, the which may be doen moste easely: for asmoche, as the enemye myndyng to haue his artillerie stand safe, it becometh that he put them behinde, in the furthest part of the distaunces, so y^e the shot of the same, be purposyng that thei hurt not his owne men, ought to passe by right line, and by that very same al-

P. l.j.

waies:

The thirde booke.

A generall rule
againste suche
thynges as ca-
not bee with-
stode.

waies: and therefore with giuyng them place, easely
thei maie bee avoided: for that this is a generall rule,
that to those thynges, whiche cannot be withstode,
there must bee giuen waie, as the antiquitie made to
the Cliphantes, and to the carres full of bookes. I be-
leue, ye, I am more then certaine, that it semeth vnto
you, that I haue ordered and wonne a battaile after
my own maner: notwithstanding, I answer vnto you
this, when so moche as I haue saied hether to, should
not suffice, that it should be impossible, that an armie
thus ordered, and armed, should not overcome at the
first incounter, any other armie that should bee ordai-
ned, as thei order the armies now adaires, whom most
often tymes, make not but one front, hauyng no tar-
gattes, and are in suche wise vnarmed, that thei can-
not defende themselves from the enemy at hand, and
thei order them after suche sorte, that if thei set their
battailes by flank, the one to the other, thei make the
armie thinne: if thei put the one behind the other, ha-
uyng no waie to receiue the one the other, thei doe it
confusely, and apt to be easily troubled: and although
thei giue thre names to their armies, and diuide the
into thre companies, forward, battaile, and reuerward,
notwithstanding it serueth to no other purpose, then
to marche, and to distinguish the lodgynges: but in the
daie of battaile, thei binde them all to the first bunte,
and to the first fortune.

Luigi. I haue noted also in the fightryng of your
felde, how your horsemen were repulced of the ene-
mies horsemen: for whiche cause thei retired to the ex-
traordinary pikers: whereby grewe, that with the
aide of them, thei withstode, and drewe the enemies
backe: I beleue that the pikers made withstande the
horses, as you saie, but in a grosse and thicke maine
battaile, as the Swizzers make: but you in your army,
haue so the hedde five ranks of pikers, and so the
flanke seuen, so that I cannot tell how thei maie bee
able

able to withstande them.

Fabritio. Yet I haue told you, how fire rankes of pik-
 kes wer occupied at ones, in the Macedonick Salan-
 gi, albeit you ought to vnderstande, that a maine bat-
 talle of Sulzers, if it were made of a thousande ran-
 kes, it cannot occupie moze then fower, or at the most
 fve: because the pikes be fire yardes and thre quar-
 ters longe, one yarde and halfe a quarter, is occupied
 of the handes, wherefoze to the firste ranke, there re-
 maineth free fve yardes and a halfe, and a halfe quar-
 ter of pike: the seconde ranke besides that, whiche is
 occupied with the hande, consumeth a yarde and halfe
 a quarter in the space, whiche remaineth betwene the
 one ranke and the other: so that there is not left of pike
 profitable, moze then fower yardes and a halfe: to the
 thirde ranke, by this verie same reason, there remai-
 neth thre yardes and a quarter and a halfe: to the fo-
 werth, two yardes and a quarter: to the fift one yard
 and halfe a quarter: the other rankes, for to furte, be
 vnprofitable, but thei serue to restoze the firste ran-
 kes, as we haue declared, and to bee a fortification to
 those. v. When if fve of their rankes can withstande
 the horse, why cannot fve of ours withstande theim?
 to the whiche also there lacketh not rankes behinde,
 that doeth sustaine and make them the very same state,
 although thei haue no pikes as the other. And when
 the rakes of the extraordinary pikes, which are placed
 on the flanks, should seme vnto you thine, thei maye
 bee brought into a quazante, and put on the flanke
 nere the twoo battailles, whiche I set in the laste com-
 panie of the armie: From the whiche place, thei maye
 easely altogether succour the fronte, and the backe of
 the armie, and minister helpe to the horses, according
 as neede shall require.

Luigi. Would you alwaies vse this forme of or-
 der, when you would pitch a feld?

Fabritio. No in no wise: for that you ought to varie
 the

A battalle how
 greute so ever it
 bee, cannot at
 ones occupy a
 boue. v. ranked
 of pikes.

And yet it is
 not possible
 to have
 more

The thirde booke

the faction of the armie, according to the qualitie of the situation, and the condition and quantitie of the enemy, as before this reasoning dooe ende, shall bee shewed certaine insamples: but this forme is given vnto you, not so moche as mooste strongeste of all, where in deepe it is verie strong, as to the intente that thereby you maye take a rule, and an order to learne to knowe the wayes to ordeine the others: for as moche, as euery science hath his generalitie, vpon the whiche a good part of it is grounded. One thing onely I aduise you, that you neuer order an armie, after soche sorte, that those that faight afore, cannot bee succoured of theim, whiche beset behind: because he that committeth this error, maketh the greatestte parte of his armie to bee vnprofitable, and if it incounter any strength, it cannot overcome.

Luigi. There is growen in me, vpon this parte a doubt. I haue seen that in the placing of the battalies, you make the fronts of foure on a side, the middelle of thre, and the last partes of two, and I beleue, that it were better to ordain them contrariwise: so that I thinke, that an armie should with more difficultie bee broken, when he that should charge vpon it, the more that he should entre into the same, so moche the stronger he should finde it: and the order deuised of you, me thinks maketh, that the more it is entered into, so moche the weaker it is founde.

Fabius. If you should remember howe to the Triarii, whom were the thirde order of the Romain Legions, there were not assigned more then sixe hundred men, you would doubtlesse, hauing vnderstood howe they were placed in the laste companie: For that you should see, howe I moued of this insample, haue placed in the last companie twoo battalies, whiche are nine hundred men, so that I come rather (folowynge the insample of the Romaine people) to erre, for hauing taken to many, then to fewe: and although this insample

The first booke
 of the art of warre
 by the famous
 capitaine morice
 of orleans
 translated
 into english
 by
 Iohn de Witt

An advertisement
 concerning the
 pitchyng of a
 felde.

ple should suffice, I will tell you the reason, the which is this. The first fronte of the armie, is made perfectly whole and thicke, bicause it must withstande the byt of the enemies, and it hath not to receiue in it any of their selowes: and for this, it is fitte that it bee full of menne: bicause a selwe menne, should make it weake, either for thinnesse, or for lacke of sufficiente number: but the seconde companie, for as moche as it must first receiue their frendes, to sustain the enemye, it is mete that it haue greate spaces, and for this it behoueth, that it be of lesse number then the first: for yf it wer of greater number, or equall, it should bee conueniente, either not to leaue the distaunces, the which should be disorder, or leauyng theim, to passe the boundes of those afoze, the which should make the facion of the armie vnperfecte: and it is not true that you saie, that the enemye, the moze that he entereth into the maine battaile, so moche the weaker he findeth it: for that the enemye, can neuer saight with the seconde order, except the first be ioined with the same: so that he cometh to finde the middell of the maine battaile moze stronger, and not moze weaker, hauyng to saight with the first, and with the seconde order altogether: the verie same happeneth, when the enemye should come to the thirde companie: for that there, not with twoo battailes, which is sounge freshe, but with all the maine battaile he must saight: and for that this last part hath to receiue moste men, the spaces therof is requisite to be greatest, and that which receiueth them, to be the lesse number.

How the fronte of the armie ought to be made.

How the middell part of the armie ought to be ordered.

The ordering of the hinder part of the army

Luigi. It pleaseth me the same that you haue told: but answere me also this: if the five first battailes doe retire betwene the thre seconde battailes, and after the eight betwene the twoo thirde, it semeth not possible, that the eight beyng brought together, and then the tenne together, maie bee receiued when thei bee eight, or when thei be tenne in the verie same space,

The thirde booke.

whiche receiued the five.

Fabricio. The first thyng that I answer is, that it is not the verie same space: For that the five haue lower spaces in the middeste, whiche retiryng betwene the thre, or betwene the twoo, thei occupie: then there remaineth the same space, that is betwene the one maine battaile and the other, and the same that is, betwene the battailes, and the extraoꝛdinarie Pikes, all the whiche spaces makes largenesse: besides this, it is to bee considered, that the battailes kepe other maner of spaces, when thei bee in the orders without being altered, then when thei be altered: so that in the alteration: either thei thryng together, or thei enlarge the orders: thei enlarge theim, when thei feare so moche, that thei fall to flying, thei thrust them together, when thei feare in soche wise, that thei seeke to saue them selues, not with runnyng a waile, but with defence: So that in this case, thei should come to be distinguished, and not to be enlarged. Moreover, the five ranks of the Pikes, that are before, so soon as thei haue begun the faight, thei ought betwene their battailes to retire, into the taile of the armie, so to giue place to the Targuet men, that thei maie faight: and thei goyng into the taile of the armie, maie dooe soche service as the capitaine should iudge, were good to occupie theim a bonte, where in the so, ward, the faight being mingled, thei should other wise bee altogether vnprofitable. And so this the spaces ordained, come to bee so: the remnaunte of the menne, wide inough to receiue them: yet when these spaces should not suffice, the flanks on the sides be men, and not walles, who giuyng place, and enlargyng the selues, maie make the space to containe so moche, that it maie bee sufficient to receiue theim.

Luigi. The ranks of the extraoꝛdinarie Pikes, whiche you place on the flanches of the armie, when the first battailes retire into the second, will you haue them

The retire of
the Pikes, to
place the Tar-
get men.

them to stande still, and remain with twoo hoznes to the armie: Will you that thei also retire together, with the battailes: The whiche when thei should do, I see not how thei can, hauing no battailes behinde with distaunces that maie receiue them.

Fabritio. If the enemye overcome them not, when he inforseth the battailes to retire, thei maie stande still in their order, and hurte the enemye on the flank, after that the first battailes were retired: but if he should also overcome them, as semeth reason, being so puisaunte, that he is able to repulce the other, thei also ought to retire: whiche thei maie dooe excellently well, although thei haue not behinde, any to receiue them: bicause from the middest, thei maie redouble by right line, entering the one ranke into the other, in the maner whereof wee reasoned, when it was spoken of the order of redoubling: True it is, that to mynde redoubling to retire backe, it behoueth to take an other waie, then the same that I shewed you: for that I told you, that the second ranke, ought to enter into the first, the sowerth into the thirde, and so forth: in this case, thei ought not to begin before, but behinde, so that redoubling the rankes, thei maie come to retire backward, not to tourne forward: but to answer to all the same, that vpon this foughten field by me shewed, might of you bee replied, I saie vnto you again, that I haue ordained you this armie, & shewed this foughten field for two causes, the one, for to declare vnto you how it is ordered, the other to shewe you how it is exercised: the order, I beleue you vnderstande moſte well: and concerning the exercise, I saie vnto you, that thei ought to be put together in this forme, as often times as maie be: for as moche as the heddes learne thereby, to kepe their battailes in these orders: for that to particulare souldiours, it appertaineth to keepe well the orders of euery battaile, to the heddes of the battailes, it appertaineth to keepe them well in euery order of

Howe the pikers that are placed on the flanks of the armie ought to gouerne them selves when the rest of the armie is driuen to retire.

The exercise of the army in general.

The thirde booke.

The number
that is mete to
be writt in the
Ansigne of eu-
ery band of mē.

The degrees
of honours in
an arme, wher
the soche a mē
ought to rise
by, as should
bee made a ge-
nerall capitaine

the armie, and that thei knowe how to obeie, at the
commaundement of the generall capitaine: therefore,
it is conueniente that thei knowe, how to ioyne the
one battaile with thother, that thei maie knowe how
to take their place atones: and so; this cause it is mete
that the ansigne of euery battaile, haue writt in some
euidēt part, the number therof: as well so; to be able
to commaunde them, as also so; that the capitaine, and
the souldiours by the same number, maie moze easely
knowe them againe: also the maine battailes, ought
to be nombred, and to haue the number in their prin-
cipall Ansigne: Therefore it is requisite, to knowe of
what number the maine battaile shall be, that is pla-
ced on the left, or on the right hoine, of what numbers
the battailes bee, that are set in the fronte, and in the
middeste, and so forth of the other. The antiquitie
would also, that these numbers should bee steps to
degrees, of honours of the armies: as so; in sample, the
first degree, is the Detie capitaine, the seconde, the hedde
of fiftie ordinarie Meliti, the thirde, the Centurion,
the fourth, the hedde of the first battaile, the fiftie, of
the second, the first, of the thirde, and so forth, euen to
the tenth battaile, the whiche must be honoured in the
seconde place, nexte the generall capitaine of a maine
battaile: no; any ought to come to the same hedde, if
first, he haue not risen by all these degrees. And be-
cause besides these hedges, there be the three Conesta-
bles of the extraordinarye Bikes, and two of the ex-
traordinarye Meliti, I would that thei should be in the
same degree of the Conestable of the first battaile: no;
I would not care, that there were fire men of like de-
gree, to thintent, that euery one of them might strue,
who should doe better, so; to be promised to be hedde of
the seconde battaile. Then euery one of these hedges,
knowyng in what place his battaile ought to be sette
in, of necessitie it must folowe, that at a sounde of the
Trompette, so sone as the hedde standarde shall bee
erected,

erected, all the armie shall be in their places: and this is the first exercise, whereunto an armie ought to bee accustomed, that is to set them quickly together: and to doe this, it is requisite euery daie, and diuers times in one daie, to set them in order, and to disorder them.

Luigi. What armes would you that than signes of all the armie, should haue beside the number?

Fabritio. The standarde of the generall Capitaine ought to haue the armes of the Prince of the armie, all the other, maie haue the verie same armes, and to varie with the fieldes, or to varie with the armes, as should seme beste to the Lorde of the armie: Because this importeth little, so that the effect growe, that thei be knowen the one from the other. But let vs passe to the other exercise: the which is to make them to moue, and with a conuenient pace to marche, and to se, that marchyng thei kepe the orders. The thirde exercise is, that thei learne to handle themselves in the same manner, whiche thei ought after to handle themselves in the date of battaile, to cause the artillerie to shoote, and to bee drawen out of the waie, to make the extraordinary Ueluti to issue out, after a likenes of an assault, to retire them: To make that the firste battailes, as though thei wer soe charged, retire into the spaces of the second: and after, all into the thirde, and fro thens euery one to retourne to his place: and in soche wise to vse thei in this exercise, that to euery manne, all thyng maie be knowen, and familiar: the which with practise, & with familiaritie, is brought to passe moste quickly. The fourth exercise is, that thei learne to knowe by meane of the sounde, and of the Ansigne, the commaundemente of their capitaine: for as moche as that, whiche shall be to them pronounced by voice, thei without other commaundemente, maie vnderstande: and because the importaunce of this commaundement, ought to growe of the sounde, I shall tell you what soundes the antiquitie vsed. Of the Hatedemo-

The armes that ought to bee in the standarde, and in the ansignes of an armie.

The second and thirde exercise of an armie.

The fourth exercise of an armie.

The thirde booke

The soundes
of the instru-
mentes of mu-
sicke, that the
antiquitie vsed
in their ar mies

infans, accoꝝdyng as Lucido affiꝛmeth, in their ar-
mies were vsed Flutes: soꝝ that thei iudged, that this
armonie, was moꝛte mete to make their armie to pro-
cede with graueitie, and with furie: the Carthaginẽs
beyng moued by this verie same reason, in the first as-
saulte, vsed the violone. Aliatte kyng of the Lidians,
vsed in the warre the violone, and the Flutes: but A-
lexander Magnus, and the Romaines, vsed hoꝛnes,
and Trumpettes, as thei, that thought by vertue of
soche instrumentes, to bee able to incourage moꝛe the
myndes of Souldiours, and make theim to faight the
moꝛe lustely: but as we haue in armyng the armie, ta-
ken of the Greke maner, and of the Romaine, so in
distributyng the soundes, we will keepe the cullomes
of the one, and of the other nacion: therfoꝛe, nere the
generall capitaine, I would make the Trompettes (to
stand, as a sounde not onely apt to inflame the armie,
but apte to bee heard in all the whole tumult moꝛe,
then any other sounde: all the other soundes, whiche
shold bee aboute the Constables, and the heddes of
maine battailes I would, that thei shold bee smalle
Dummes, and Flutes, sounded not as thei sounde
theim now, but as thei vse to sounde theim at feastes.
The capitaine then with the Trompet, shold the we
when thei must stande still, and go soꝝward, oꝝ tourne
backward, when the artillerie must shoote, when the
extraoꝝdinarie Heliti must moue, and with the varie-
tie oꝝ distinction of soche soundes, to the we vnto the
armie all those mocions, whiche generally maie bee
shewed, the whiche Trompettes, shold bee after fol-
lowed of the Dummes, and in this exercise, bicause it
impozeth moche, it becometh moche to exercise the ar-
mie. Concernyng the hoꝛsemen, there would be vsed
likewise Trompettes, but of a lesse sounde, and of a
diuers voice from those of the Capitaine. This is as
moche as is come into my remembraunce, aboute the
oꝝder of the armie, and of the exercise of the same.

What is as-
signed by the
sounde of the
Trompet.

Luigi.

Luigi. I praye you let it not be greivous vnto you to declare vnto me an other thyng, that is, for what cause you made the light hoysmen, and the extraordinarie Heliti, to goe with cries, rumours, and furie, when thei gaue the charge: And after in the incountering of the rest of tharmie, you shewed, that the thing folowed with a moste greate scilence: And so; that I vnderstande not the occasion of this varietie, I would desire that you would declare it vnto me.

Fabritio. The opinion of auncient capitaines, hath been diuers about the commyng to handes, whether thei ought with rumour to go a pace, or with scilence to go faire and softely: this laste waie, serueth to kepe the order moze sure, and to vnderstande better the commaundementes of the Capitaine: the firste, serueth to incourage moze the mindes of men: and so; that I beleue, that respecte ought to bee had to the one, and to the other of these twoo thynges, I made the one goe with rumour, and thother with scilence: no; me thinke not in any wise, that the continuall rumours bee to purpose: bicause thei lette the commaundementes, the whiche is a thyng moze pernicious: no; it standeth not with reason, that the Romaines shold, except at the firste assaulte to make rumour: for that in their histories, is seen many tymes to haue happened, that thjough the wordes, and comfortinges of the capitaine the souldiours that ranne awaie, were made to stande to it, and in sondrie wise by his commaundemente, to haue varied the orders, the whiche should not haue folloved, if the rumours had been louder then his voyce.

The cries, and rumours, when with the firste charge is giue vnto the enemies, and the silence that ought to bee had after, when the fight is once begunne.

The

The fowerth booke of the arte of warre,
of Nicholas Machiauell, Citezeine
and Secretarie of Florence,
vnto Laurence Philip
Strozze.

Luigi.



Eng that vnder my go-
uernement, a field hath been
wonne so honourably, I sup-
pose that it is good, that I
tempt not fortune any more,
knowyng how variable, and
vnstable she is: and therefore,
I desire to giue by my gover-
nement, and that Zanobi do

execute now this office of demaundayng, myndyng to
sollowe the order, whiche concerneth the youngeste:
and I knowe he will not refuse this honoure, or as
we would saie, this labour, as well for to doe me plea-
sure, as also for beyng naturally of more stomack thā
I: nor it shall not make hym afraied, to haue to enter
into these tranailes, where he maie bee as well ouer-
come, as able to conquer.

Zanobi. I am readie to do what soeuer shall please
you to appointe me, although that I desire more wil-
lingly to heare: for as moche as hether to, your questi-
ons haue satisfied me more, then those should haue
pleased me, whiche in harkenynge to your reasonyng,
hath chaunced to come into my remembraunce. But
sir, I beleue that it is good, that you lese no tyme, and
that you haue patience, if with these our Ceremonies
we trouble you.

Fabricio. You doe me rather pleasure, for that this
variacion of demaunders, maketh me to knowe the
sundrie

fund;ic wittes, and sunderie appetites of yours: But remaineth there any thyng, whiche seemeth vnto you good, to bee toynd to the matter, that already hath been reasoned of:

Zanobi. Twoo thinges I desire, befoze you passe to an other parte: the one is, to haue you to shewe, if in orderyng armie, there needeth to bee vsed any other facion: the other, what respectes a capitaine ought to haue, befoze he condaite his men to the saight, and in thesame any accidente risynge or growynge, what remedie maie be had.

Fabricio. I will inforce my self to satisfie you, I will not answere now distinctly to your questions: for that whillette I shall answere to one, many tymes it will come to passe, that I muste answere to an other. I haue tolde you, how I haue shewed you a facion of an armie, to the intent, that accoꝝdyng to thesame, there maie bee giuen all those facions, that the enemye, and the situation requirerh: For as moche as in this case, bothe accoꝝdyng to the power thereof, and accoꝝdyng to the enemye, it proceedeth: but note this, that there is not a more perillous facion, then to defende moche the front of tharmie, if then thou haue not a most puissant, and moste great hoste: other wise, thou oughtest to make it rather grosse, and of small largenesse, then of moche largenesse & thin: for when thou hast se we me in coparison to the enemye, thou oughtest to seke other remedies, as is to ordain thine army in soche a place, wher thou maiest be fortified, either throught rivers, or by meanes of fennes, after such sort, that thou canst not bee compassed aboute, or to inclose thy self on the flackes with diches, as Cesar did in Fraunce. You haue to take in this case, this generall rule, to enlarge your self, or to draw in your self with the frōt, accoꝝdyng to your number, & thesame of the enemye. For the enemyes being of lesse number, thou oughtest to seke large places, hauynge in especially thy men well instructed: to

To defende
moche the frōt
of an armie, is
most perillous

What is beste
for a capitaine
to dooe, where
his power is
moche lesse the
the enemyes po-
wer.

A generall rule

D. J. the

The fowerth booke.

the intent thou maifest, not onely compasse aboute the
 enemye, but to defende thy orders: for that in places
 rough and difficulte, beyng not able to preuaile of thy
 orders, thou commeste not to haue any aduantage,
 hereby greiue, that the Romaines almoste alwaies,
 sought the open fieldes, and aduoided the straights.
 To the contrarie, as I haue said, thou oughtest to do,
 if thou hast fewe menne, or ill instructed: for that then
 thou oughtest to seeke places, either where the litte
 number maie be saued, and where the small experie
 dooe not hurte thee: Thou oughtest also to chuse the
 higher grounde, to be able moze easely to infest them:
 notwithstanding, this aduertisment ought to be had,
 not to ordaine thy armie, where the enemye maie spie
 what thou doest, and in place nere to the rootes of the
 same, where the enemies armie maie come: For that
 in this case, hauyng respect vnto the artillerie, the
 higher place shall gette thee disaduantage: Because
 that alwaies and commodiously, thou mightest of the
 enemies artillerie bee hurte, without beyng able to
 make any remedy, and thou couldest not commodious
 ly hurte the same, beyng hindered by thine owne me.
 Also, he that prepareth an armie to fight a battaile,
 ought to haue respect, bothe to the Sonne, and to the
 Winde, that the one and the other, doe not hurte the
 fronte, for that the one and the other, will let thee the
 fight, the one with the beames, and the other with the
 duste: and mozeouer, the Winde hindereth the wea
 pons, whiche are stroken at the enemye, and maketh
 their blowes moze feable: and concerning the Sonne,
 it sufficeth not to haue care, that at the firste it shine
 not in the face, but it is requisite to consider, that in
 creasyng the daye, it hurte thee not: and for this, it
 should bee requisite in orderyng the men, to haue it all
 on the backe, to the entente it should haue to passe
 moche tyme, to come to lye on the fronte. This was
 obserued of Aniball at Canne, and of Maro at

The higher
 grounde ought
 to be chosen.

An aduertisment
 not to place an
 armie where the
 enemye maie see
 what the same
 doeth.

Respectes for
 the Sonne and
 Winde.

gaind

gaing the Cimbrians. If thou happen to be moche in
seriour of hoyses, ordaine thine armie emongesse moun-
tains, and trees, and like impedimentes, as in our time
the Spaniards did, when thei ouerthelwe the French
menne at Cignuola. And it hath been seen many ti-
mes, with all one souldiours, varyng onely the or-
der, and the place, that thei haue become of losers vic-
tozers: as it happened to the Carthageners, whom ha-
uyng been overcome of Marcus Regulus diners ty-
mes, were after by the counsaill of Santippo, a Lacede-
monian, victorious: whom made thim to go doune
into the plaine, where by vertue of the hoyses, and of
Elephantes, thei were able to overcome the Romanes.
It semes vnto me, accordyng to the auncient in-
samples, that almoſte all the excellent Captaines,
when thei haue knowen, that the enemy hath made
strong one side of his battaile, thei haue not set against
it, the moſte strongest parte, but the moſte weakest, &
thoſe moſte strongest, thei haue set against the moſt
weakest: after in the beginning the faighte, thei haue
commaunded to their strongest parte, that onely thei
sustaine the enemy, and not to preace vpon hym, and
to the weaker, that thei suffer them selues to be over-
come, and to retire into the hindermoste bandes of the
armie. This breedeth twoo greate disorders to the
enemy: the firste, that he findeth his strongest parte
compassed about, the second is, that sempyng vnto him
to haue the victorie, seldome tymes it happeneth, that
thei disorder not them selues, whereof groweth his
sodain losse. Cornelius Scipio beyng in Spain, aga-
inst Asdruball of Carthage, and vnderstanding how
to Asdruball it was knowen, that he in the orderng
the armie, placed his Legions in the midst, the whi-
che was the strongest parte of his armie, and so; this
how Asdruball with like order ought to procede: after
when he came to faighte the battaile, he chaunged or-
der, and put his Legions on the hoyses of the armie,

The varyng
of order & place
more caus. the
conquered to be
come victors

A pollicie in the
ordering of me
and pitchyng
of a helde,

The fowerth booke.

and in the middest, placed all his weakeſte men : then coming to the handes, in a sodain those men placed in the middeste, he made to marche softly, and the hoꝛnes of the armie, with celeritie to make foꝛwarde, so that onely the hoꝛnes of bothe the armies fought, and the handes in the middest, though beyng distaunt the one from the other, loyned not together, and thus the strongest parte of Scipio, came to saight with the weakest of Antuball, and overcame hym. The whiche waie was then profitable, but now hauyng respect to the artillerie, it cannot be vsed: because the same space, whichs should remain in the middest, betwene the one armie and the other, should giue tyme to the same to shoote : The whiche is moste pernicious, as aboue is saied: Therefore it is requisite to laie this waie aside, and to vse, as a little afoze we saied, makyng all the armie to incounter, & the weakest parte to giue place. When a capitaine perceiuet, that he hath a greater armie then his enemye, mindyng to compasse hym aboute, befoze he be aware, let hym ordaine his fronte equall, to the same of his aduersaries, after, so sone as the saight is begun, let hym make the fronte by a little and little to retire, and the flankes to bestende, and alwaies it shall happen, that the enemye shal find hymself, befoze he be aware compassed about. When a capitaine will saight, as it were sure not to be broken, let hym ordaine his armie in place, where he hath refuge nere, & safe, either betwene Fennes, or betwene hilles, or by some strong citee : so that in this case, he cannot bee followed of the enemye, where the enemye maye be pursued of him: this poynte was vsed of Antuball, when fortune began to become his aduersarie, and that he doubted of the valiauntnesse of Marcus Marcellus. Some to trouble the orders of the enemye, haue commaunded those that were light armed, to begin the saight, and that beyng begunne, to retire betwene the orders : and when the armies were after buckled

How to come
passe about the
enemies power

How a cap-
taine maye
saight and be
as it were sure,
not to be over-
come.

How to trouble
the orders of
the enemye.

buckled together, and that the fronte of either of them were occupied in faightyng, thei haue made them to issue out by the flanches of the battaile, and thesame haue troubled and broken. If any perceiue hymself to bee inferiour of horse, he maie besides the waies that are alredie shewed, place behinde his hoysmen a battaile of pikes, and in faightyng take order, that thei giue waie to the pikes, and he shall remain alwaies superiour. Many haue accustomed to vse certain footmenne lighte armed, to faighte among hoysmen, the whiche hath been to the chivalrie mooste greate helpe. Of all those, which haue prepared armies to the field, he mooste praised Aniball and Scipio, whē thei fought in Africk: and for that Aniball had his armie made of Carthaginers, and of straungers of diuers nations, he placed in the first fronte thereof. lxxx. Elephantes, after he placed the straungers, behinde whom he sette his Carthaginers, in the hindermoste place, he putte the Italians, in who he trusted little: the whiche thing he ordained so, for that the straungers haupng before them the enemye, and behinde bepng inclosed of his men, could not flie: so that being constrained to faight thei should overcome, or wearie the Romaines, supposyng after with his freshe and valiaunte men, to be then able easely to overcome the Romaines, keepng wearied. Against this order, Scipio set the Astati, the Principi, and the Triary, in the accustomed manner, to bee able to rescue the one the other, and to rescue the one the other: he made the fronte of the armie, full of boide spaces, and bicause it should not be perceiued but rather should seme vnited, he filled them ful of belittles to whom he commaunded, that so sone as the Elephantes came, thei should auoide, and by the ordinarie spaces, should enter betwene the Legins, and leaue open the waie to the Elephautes, and so it came to passe, that it made vaine the violence of them, so that commyng to handes, he was superiour.

What a captaine oughte to dooe when he hath not so many hoysmen as the enemye.

A greate aide for hoysmen.

The policies vsed betwene Aniball and Scipio.

The fowerth booke.

Zenobi. You haue made me to remember, in alledging me this battaile, how *Scipio* in fighting, made not the *Asiati* to retire into the borders of the *Pencipi*, but he denied them, and made them to retire in the boines of the armie, to thintent they might giue place to the *Pencipi*, when he would soze sozwarde: therefore I would you should tell me, what occasion moued hym, not to obserue the accustomed order.

Fabritio. I will tell you. *Amiball* had putte all the strength of his armie, in the seconde bande: where soz *Scipio* soz to set againste the same like strength, gathered the *Pencipi* and the *Triary* together: so that the distaunces of the *Pencipi*, being occupied of the *Triary*, there was no place to bee able to receiue the *Asiati*: and therefore he made the *Asiati* to deuide, and to go in the boines of the armie, and he dyuise them not betwene the *Pencipi*. But note, that this waie of opening the first bande, soz to giue place to the seconde, cannot bee vsed, but when a man is superiour to his enemy: soz that then there is commoditie to bee able to dooe it, as *Scipio* was able: but being vnder, and repulced, it cannot be dooen, but with thy manifest ruine: and therefore it is conuenient to haue behinde, orders that may receiue thee, but let vs tourne to our reasonyng. The auncient *Asiaticans*, amongest other thynges deuised of them to hurt the enemies, vsed carres. The whiche had on the sides certayne hookes, so that not onely they serued to open with their violence the bandes, but also to kill with the hookes the aduersaries: against the violence of those, in thye maners they prouided, either they sustained them with the thickenesse of the rates, or they receiued them betwene the bandes, as the *Elephantes* were receiued, or els they made with arte some strong resistance: As *Silla* a Romanaine made against *Archelaus*, whom had many of these carres, whiche they called hooked, who soz to sustaine them, dyane many stakes into the ground, behinde

Carres full of
hookes made
to destroye the
enemies.

The remedy
that was vsed
against Carres
full of hookes.

binde his first bandes of men, whereby the cartes be-
 yng stopped, lost their violence. And the newe maner
 that Sulla vsed against hym in orderyng the armie, is
 to bee noted: for that he put the Veliti, and the horse,
 behinde, and all the heauie armed afoze, leauyng ma-
 ny distaunces to be able to sende befoze those behinde,
 when necessity required: whereby the fight beyng be-
 gun, with the helpe of the horsemen, to the whiche he
 gaue the waie, he got the victorie. To intende to trou-
 ble in the faight the enemies armie, it is conueniente
 to make some thyng to growe, that maie make theim
 afrated, either with showyng of newe helpe that com-
 meth, or with showyng thynges, whiche maie repre-
 sente a terrour vnto theim: after soche sorte, that the
 enemies begiled of that sight, maie be afrated, & being
 made afrated, thei maie easely bee overcome: the whi-
 che waies Minutius Rufus vsed, and Aecilius Glabione
 Consults of Rome. Caius Sulpitius also set a greate
 many of sackes vpon Oxes, and other beastes vnpri-
 sitable for the warre, but in soche wise ordained, that
 thei semed men of armes, and he commaunded, that
 thei should appere vpon a hill, while he were a faigh-
 tyng with the Frenchemen, whereby grew his vic-
 torie. The verie same did Marius, when he soughte
 against the Duchemen. When the fained assaultes a-
 uaillyng moche, whilest the faight continueth, it is co-
 ueniente, that the very assaultes in deede, doe helpe
 moche: in especially if at vnwares in the midst of the
 faight, the enemy might bee assaulted behinde, or on
 the side: the whiche hardely maie be doen, if the coun-
 trie helpe thee not: for that when it is open, parte of
 thy men cannot bee hid, as is mete to bee doen in like
 enterpryses: but in woddie or hille places, and for this
 apt for ambushes, parte of thy men maie be well hid-
 den, to be able in a sodain, and contrary to the enemies
 opinion to assault him, whiche thyng alwaies shall be
 occasion to gine thee the victorie. It hath been some-
 tyme

The strange
 manner that At-
 la vsed in orde-
 ring his army
 against Archy-
 laus.

How to trouble
 in the faight
 the armie of the
 enemies.

A policie of
 Caius Sulpi-
 cius, to make
 his enemies a-
 frated.

A policie of
 Marius aga-
 inst the Duche-
 menne.

The fowerth booke

A policie of
greate impor-
taunce, while a
battaile is
faightyng.

How horsemen
maie bee disor-
dered.

How the turke
gaue the So-
phis an over-
throwe.

How the Span-
iards ouer-
came the armie
of Amilcare.

How to traîne
the enemye, to
his destruction

A policie of
Cullo Hostili-
us and Lucius
Silla in des-
semplying of a
mischaunce.

tyme of greate importaunce, whilst the faighte con-
tinueth, to solue voices, whiche doe pronounce the ca-
pitaine of the enemies to be dedde, or to haue overcome
on the other side of the armie: the whiche many times
to them that haue vsed it, hath giuen the victorie. The
chualerie of the enemies maie bee easely troubled, ei-
ther with sightes, or with rumours, not vsed: as Cre-
so did, whom put Camelles againste the hoxses of the
aduersaries, and Pirrus sette againste the Romaine
hoxsemen Elphantes, the sighte of whiche troubled
and disordered them. In our time, the Turke discom-
fited the Sophi in Persia, and the Solbane in Hurria
with no other, then with the noyse of Harkabuses, the
whiche in soche wise, with their strange rumours,
disturbed the hoxses of those, that the Turke mighte
easely overcome them: The Spaniards to overcome
the armie of Amilcare, put in the firste fronte Cartes
full of towne dja wen of oren, and comming to handes,
thei kindeled fire to the same, wherfoze the oren to flie
from the fire, thrust into the armie of Amilcar, and o-
pened it. Thei are wonte (as we haue saied) to begile
the enemye in the faight, dja wyng him into thei am-
bushes, where the Countrie is commodious for the
same purpose, but where it were open and large, ma-
ny haue vsed to make ditches, and after haue couered
them lightly with bowes and yearth, and leste certain
spaces whole, to be able betwene those to rettre: after,
so soon as the faight hath been begunne, retiryng by
those, and the enemye folowing the, hath fallen in the
pittes. If in the faight there happen thee, any accident
that maie feare thy souldiours, it is a moste pruden-
te thyng, to knowe how to desemble it, and to peruert it
to good, as Cullo Hostilius did, and Lucius Silla: who
seyng while thei fought, how a parte of his men wer
gone to the enemies side, and how the same thing had
verie moche made afraied his men, he made straighte
waie throughout all the armie to be vnderstoode, how
all

all thing proceeded, according to his order: the which not onely did not trouble the armie, but it increased in them so moche stomack, that he remained victorious. It happened also to Silla, that hauyng sente certaine souldiours to doe some businesse, and thei beyng slain he saied, to the intent his armie should not be made afraid thereby, that he had with craste sent theim into the handes of the enemies, so that he had found them nothyng faithfull. Sertorius saightyng a battaile in Spaine, slue one, whom signified vnto hym the death of one of his capitaines, so feare that tellyng the very same to other, he should make theim afrated. It is a moste difficult thyng, an armie beyng now moued to fle, to stae it, and make it to saight. And you haue to make this distinction: either that it is all moued, and then to be impossible to tourne it, or there is moued a parte thereof, and then there is some remedie. Many Romain capitaines, with making alsoe those whiche fled, haue caused them to stae, making them ashamed of running a waie, as Lucius Silla did, where alredey parte of his Legions beyng tourned to flight, diuen a waie by the men of Mithridates, he made alsoe them with a swearde in his hande cryng: if any aske you, where you left your capitaine, saie, we haue left hym in Boecia, where he saighteth. Attillus a consull set againste those that ran a waie, them that ranne not a waie, and made the to vnderstande, that if thei would not tourne, thei should be slaine of their frendes, and of their enemies. Philip of Macedonia vnderstanding how his men feared the Scythian souldiours, placed behinde his armie, certaine of his moste trustie hoysesmen, and gaue commission to theim, that thei should kill whom so euer fledde: wherfoze, his men myndyng rather to die saightyng, then flyng, ouercame. Many Romaines, not so moche to stae a flight, as so to giue occasiō to their men, to make greater foze, haue whilste thei haue foughte, taken an Ansigne out of their

Sertorius slue
a man for tel-
ling him of the
death of one of
his capitaines

Some certayne
capitaines haue
staied their men
that hath been
cunning alwaie

Attillus con-
strained his men
that ran alwaie
to tourne again
and to saight.

How Philip
king of Mace-
donia made his
men afrated to
run a waie,

The fowerth booke.

owne mennes handes, and thzowen it emongeste the
enemies, and appointed rewardes to hym that could
get it again. I doe not beleue that it is out of purpose,
to toyne to this reasonyng those thynges, whiche
chaunce after the faght, in especially beyng brief thin-
ges, and not to be left behinde, and to this reasonyng
conformable inough. Wherefoze I saie, how the fiede
is losse, or els wonne: when it is wonne, the victorie
ought with all celeritie to be solowed, and in this case
to imitate Cesar, and not Aniball, whom stayng af-
ter that he had discomfited the Romaines at Canne,
losse the Empire of Rome: The other neuer rested af-
ter the victorie, but solowed the enemye beyng bzokē,
with greater violence and furie, then when he assal-
ted hym whole: but when a capitaine dooeth lese, he
ought to see, if the losse there maie growe any bri-
lite vnto hym, in especially if there remain any residue
of tharrie. The commoditie maie growe of the small
aduertisement of the enemye, whom mooste often times
after the victorie, becometh negligēt, and giueth thee
occasion to opposse hym, as Marcius a Romaine op-
pressed the armie of the Carthaginers, whom hauing
slain the tww Scipions, and bzoken their armie, not
esemyng the same remnaunt of menne, whiche with
Marcius remained a liue, were of hym assaulted and
ouerthzowen: soz that it is seen, that there is no thing
so moche to bee bzought to passe, as the same, whiche
the enemye thinketh, that thou canst not attempte: be-
cause soz the mooste parte, men bee hurte mooste, where
they doubt leaste: therefore a capitaine ought when he
cannot doe this, to deuise at least with diligence, that
the losse bee lesse hurtfull, to dooe this, it is necessarie
soz thee to vse meanes, that the enemye maie not ease-
ly solowe thee, or to giue him occasion to make delates
in the first case, some after they haue been sure to lese,
haue take order with their heddes, that in diuers par-
tes, and by diuers waies they should fite, hauyng ap-
pointed

Victorie ought
with all celer-
tie to bee solow-
ed.

What a cap-
taine ought to
dooe, when he
should chaunce
to receiue an as-
sault.

How Marcius
ouercame the
armie of the
Carthaginers.

What should
be done when
the enemye
is in the field.

What should
be done when
the enemye
is in the field.

pointed wher thei should after assemble together: the which made, that the enemye (feareng to deuide the armye) was faine to let go safe either all, or the greatest part of the. In the seconde case, many haue cast before the enemye, their dearest thinges, to the entent that he taryng about the spoile, might geue the more laisure to fle. Titus Dimius vsed no small policie to hide the losse, whiche he had receiued in the faight, for asmoche as hauyng fought vntill night, with great losse of his menne, he made in the night to be buried, the greatest part of them, wherefoze in the mornyng, the enemyes seying so many slaine of theirs, and so fewe of the Romanes, beleuyng that thei had the disauantage, ran awaie. I trust I haue thus confusedly, as I saied, satisfied in good part your demaunde: in dede about the factions of the armies, there resteth me to tell you, how some tyme, by some Capitaines, it hath been bid to make theim with the fronte, like vnto a wedge, iudgyng to bee able by soche meane, more easely to open the enemyes armye. Against this faction, thei haue vsed to make a faction like vnto a paire of sheers, to be able betwene thesame boide place, to receiue that wedge, and to compasse it about, and to faight with it on euery side: wherenpon I will that you take this generall rule, that the greatest remedie that is vsed againste a deuise of the enemye, is to dooe willingly thesame, whiche he hath deuised that thou shalt dooe perforce: bicause that doyng it willingly, thou doest it with order, and with thy aduantage, and his disadvantage, if thou shouldest doe it beyng inforced, it should be thy vndoing: For the prouyng whereof, I care not to reherse vnto you, certain thynges already tolde. The aduersary maketh the wedge to open thy bandes: if thou go west with them open, thou disoorderest hym, and he disoordereth not thee. Aniball set the Elefantess in the fronte of his armye, to open with theim the armye of Scipio. Scipio went with it open, and it was the

A policie of Titus Dimius to hide a losse, whiche he had receiued in a faight.

A generall rule

Aniball

Scipio

D. y.

occasion

The fowerth booke.

Admiration.

A Capitaine
ought not to
fight without
aduantage, ex-
cepte he be con-
strained.

How aduan-
tage maye bee
taken of thy ene-
mies.

occasion of his victorie, and of the ruine of hym. As
Dyuball placed his strongest men in the middelt of the
fronte of his armie, to ouerthrowe Scipios menne:
Scipio commaunded, that by them selues thei should
retire and he broke theim: So that like deuises when
thei are seene, bee the causes of the victorie of him,
against whom thei be prepared. There remaineth me
also, if I remember my self well, to tell you what res-
pectes a Capitaine ought to haue, befoze he leade his
men to fight: vpon whiche I haue to tell you firste,
how a capitaine ought neuer to fight a battaille, ex-
cept he haue aduantage, or be constrained. The van-
tage groweth of the situacion, of the order, of hauing
more, or better menne: the necessitie, groweth when
thou seest how that not fighting, thou muste in any
wise lese, as should bee so, lackyng of money, and so
this, thy armie to bee ready all maner of waies to re-
solue, where famishment is ready to assaulte thee,
where the enemy looketh to bee ingrosed with newe
men: in these cases, thou oughtest alwaies to fight,
although with thy disaduantage: so that it is moche
better to attempte fortune, where she maye fauour
thee, then not attemptyng, to see thy certayne ruine:
and it is as greuous a faulte in this case, in a capitaine
not to fight, as to haue had occasiō to overcome, and
not to haue either knowen it through ignorance, or
lesse it through villenesse. The aduantages some ty-
mes the enemy giueth thee, and some tymes thy pru-
dence: Many in passyng Riuers haue been broken of
their enemy, that hath been aware thereof, who hath
taried, till the one halfe hath been of the one side, and
the other halfe on the other, and then hath assaulted
them: as Cesar did to the Sutzers, where he destroyed
the fowerth parte of theim, through beyng halfe ouer
a river. Some tyme thy enemy is sounde wearie, so
hauing followed thee to vndercite, so that findyng
thy self fresh and lustie, thou oughtest not to let passe
soche

soche an occasion: besides this, if the enemy offer vnto thee in the morning betymes to fight, thou maiest a good while deferre to issue out of thy lodging, and when he hath stood long in armour, and that he hath losse that same firste heate, with the whiche he came, thou maiest then fight with him. This waie Scipio and Metellus vsed in Spaine: the one against Asdruball, the other against Sertorius. If the enemy be diminished of power, either for hauing deuided the armie, as the Scipions in Spain, or for some other occasion, thou oughtest to proue chaunce. The greatest parte of prudent capitaines, rather receiue the violence of the enemies, then go with violence to assault them: for that the furie is easely withstoode of sure and steddie menne, and the furie being sustained, conuerteth lightly into vilenesse: Thus Fabius did against the Hannites, and against the Galles, and was victorious and his felowe Decius remained slain. Some fearing the power of their enemies, haue begun the fight a little before night, to the intent that their men chauncing to bee overcome, might then by the helpe of the darkenesse thereof, saue theim selues. Some hauing knownen, how the enemies armie being taken of certaine supersticion, not to fight in soche a tyme, haue chosen the same tyme to fighte, and overcome: The whiche Cesar obserued in Fraunce, against Ariouistus, and Vespasian in Surrie, against the Iewes.

The greatest and moste importaunte aduertismente, that a capitaine ought to haue, is to haue aboute hym faithfull menne, that are wise and moste expert in the warre, with whom he must continually consulte and reason of his men, and of those of the enemies, whiche is the greater number, whiche is best armed, or best on horsebacke, or best exercised, whiche be moste apte to suffer necessitie, in whom he trusteth moste, either in the footemen, or in the horsemen: after thei ought to consider the place where thei be, and whether it be

Furie with-
stode, conuerteth
into vilenesse.

What maner
of men a cap-
taine ought to
haue about him
continually, to
consult withall

The fourth booke.

The condicions
of the capitaine
of the enemies,
& of those that
are about hym
is mosse requi-
site to bee kno-
wen.

A timorous ar-
my is not to be
conducd to
saighe.
How to auoide
the saighting
of a filde.

more to the purpose for the enemy, then for him: which
of theim hath victualles mosse cominodious: whether
it be good to deferre the battaile, or to saight it: what
good might bee giuen hym, or taken awaie by tyme:
for that many tymes, souldiours seying the warre to
be delaied, are greued, and beyng wearie, in the pain
and in the tediousnesse therof, will forsake thee. It im-
porteth aboue all thyng, to knowe the capitaine of the
enemies, and whom he hath aboute hym, whether he
be rashe, or politike, whether he be fearfull, or hardie:
to see how thou maiest truste vpon the aidyng souldi-
ours. And aboue all thyng thou oughtest to take hede,
not to condauct the armie to saight when it feareth, or
when in any wise it mistrusteth of the victorie: for that
the greatest signe to lose, is when thei beleue not to be
able to winne: and therfore in this case, thou oughtest
to auoide the saighting of the filde, either with
doynge as Fabius Maximus, whom incampyng in
strong places, gaue no courage to Aniball, to goe to
finde hym, or when thou shouldest thinke, that the ene-
mie also in strong places, would come to finde thee, to
departe out of the filde, and to deuise the menne into
thy townes, to the intent that tediousnesse of winnyng
them, maie wearie hym.

Zanobi. Cannot the saighting of the battaile be o-
therwise auoided, then in deuising the armie in sun-
derle partes, and placing the men in townes?

Fabritio. I beleue that ones already, with some of
you I haue reasoned, how that he, that is in the fild,
cannot auoide to saight the battaile, when he hath an
enemy, which will saight with hym in any wise, and
he hath not, but one remedie, and that is, to place him
self with his armie distant fiftie miles at leaste, from
his aduersarie, to be able betymes to auoide him, when
he should go to finde hym. For Fabius Maximus ne-
uer auoided to saight the battaile with Aniball, but
he would haue it with his aduantage: and Aniball

Fabius Maxi-
mus.

did

The fowerth booke. Fol. lxxiij.

did not presume to bee able to overcome hym, going to finde hym in the places where he incamped: where if he had presupposed, to have been able to have overcome, it had been conveniente for Fabius, to have fought the battails with hym, or to have avoided.

Philip King of Macedonia, the same that was farther to Perse, coming to waere with the Romans, pitched his campe upon a verie high hill, to the entent not to fight with them: but the Romans wente to find hym on the same hill, and discomfited hym. Cingentoyge capitaine of the Frenchmenne, for that he would not fight the field with Cesar, whom contrary to his opinion, had passed a river, got a wase many miles with his men. The Venetians in our tyme, if they would not have come to have fought with the French king, they ought not to have taried till the French armie, had passed the River Addus, but to have gotten from them as Cingentoyge, where they hauyng taried, knewe not how to take in the passing of the men, the occasion to fight the battaille, nor to auoide it: For that the French men being nere vnto them, as the Venetians went out of their Campe, assaulted them, and discomfited them: so it is, that the battaille cannot bee avoided, when the enemye in any wise will fight, nor let no man alledge Fabius, for that so moche in the same case, he did ste the daie of battaille, as Aniball. It happeneth many tymes, that thy souldiours be willyng to fight, & thou knoweste by the number, and by the situation, or for some other occasion to have disaduauntage, and desirest to make them chaunge from this desire: it happeneth also, that necessity, or occasion, constraineth thee to fight, and that thy souldiours are euill to be trusted, and small disposed to fight: where it is necessarie in thone case, to make them afraied, and in the other to encourage them: In the first case, when perswactions suffiseth not, there is no better waie, then to giue in parte,

Philip king of Macedonia, overcome by the Romans.

How Cingentoyge avoided the fighting of the helde with Cesar.

The ignorance of the Venetians.

What is to be done when souldiours desire to fight, contrary to their captaines minde.

The fourth booke

part of the vnto the enemye, to thintent those that haue,
and those that haue not fought, maie beleue thee: & it
may very wel be doen with art, the same which to Fa-
bius Maximus hapned by chance. The armie of Fabi-
us (as you knowe) desired to fight with Antiochus ar-
mie: the very same desire had the master of his horses:
to Fabius it seemed not good, to attempte the fight:
so that through soche contrary opinions, he was faine
to denide the armie: Fabius kept his men in the campe,
the other fought, and commyng into great perill, had
been ouerthrowen, if Fabius had not rescued him: by
the which in sample the master of the horse, together
with all the armie, knewe how it was a wise waie to
obey Fabius. Concernyng to incourage theim to
fight, it should be well doen, to make them to disdain
the enemies, shewyng how thei speake slanderous
wordes of them, to declare to haue intelligence with
them, and to haue corrupted part of them, to incampe
in place, where thei maie see the enemies, and make
some light skirmishe with the, so that the thyng that
is daile seen, with moze facilitie is despised: to thewe
theim to bee vnworthie, and with an occasion for the
purpose, to reprehende them of their cowardnesse, and
for to make them ashamed, to tell theim that you will
fight alone, when thei will not beare you companie.
And you ought aboue all thyng to haue this aduertis-
mente, myndyng to make the souldiours obstinate to
fight, not to permitte, that thei maie send home any
of their substance, or to leaue it in any place, till the
warre bee ended, that thei maie vnderstande, that al-
though flyng saue their life, yet it saue thei not theim
their goodes, the loue whereof, is wonte no lesse then
thesame, to make men obstinate in defence.

Zanobi. You haue tolde, how the souldiours maie
be tournd to fight, with speakyng to theim: doe you
meane by this, that all the armie must bee spoken vn-
to, or to the heddes thereof?

Fabritio.

To the first of
the second booke
of the first booke
of the first booke

To the first of
the second booke
of the first booke
of the first booke

To the first of
the second booke
of the first booke
of the first booke

An aduertisment
to make the sol-
diours most ob-
stinately to
fight.

To the first of
the second booke
of the first booke
of the first booke

Fabricio. To perswade, or to disswade a thyng vnto
 selve, is verie easie, for that if woordes suffice not, you
 maie then vse authoritie and force: but the difficultie
 is, to remoue from a multitude an euill opinion, and
 that whiche is contrary either to the common profite,
 or to thy opinion, where cannot be used but woordes,
 the whiche is meete that thei be heard of euery man,
 myndyng to perswade them all. Wherefoze, it was re-
 quiste that the excellent Capitaines were orators:
 for that without knowyng how to speake to al the ar-
 my, with difficultie maie be wrought any good thyng:
 the whiche altogether in this our tyme is lated aside.
 Reade the life of Alexander Magnus, and you shall see
 how many tymes it was necessarie for hym to per-
 swade, and to speake publikly to his armie: otherwise
 he should neuer haue brought theim, beyng become
 riche, and full of spoile, thzough the desertes of Ara-
 bia, and into India with so moche his disease, and
 trouble: for that infinite tymes there growe thynges,
 wherby an armie ruinateth, when the capitaine either
 knoweth not, or vseth not to speake vnto thesame, for
 that this speakyng taketh a wale feare, incouraget
 the mindes, increaseth the obstinatenes to faight, dis-
 couereth the deceiptes, promiseth rewardes, sheweth
 the perilles, and the wale to auoide theim, repzehen-
 deth, praiseth, thzeateneth, filleth full of hope, praise,
 shame, and doeth all those thynges, by the whiche the
 humaine passions are extincte, or kendled: wherefoze,
 that prince, or comon weale, whiche should appointe
 to make a newe power, and cause reputacion to their
 armie, ought to accustome the souldiours thereof, to
 heare the capitaine to speake, and the capitaine to know
 how to speake vnto the. In keepyng despoiled the soul-
 diours in old tyme, to faight for their countrie, the re-
 ligion auailed moche, and the othes whiche thei gaue
 them, when thei led theim to warfare: for as moche as
 in al their faultes, thei thzeatned them not onely with

R. J. those

It is requisite
 for excellent Ca-
 pitaines to bee
 good orators.

Alexander Ma-
 gnus vsed ope-
 ly to perswade
 his armie.

The effectuous-
 nes of speaking

Souldiours
 ought to be ac-
 customed to
 heare their Ca-
 pitaine speake.

How in olde
 time souldiers
 were thzeatned
 for their faultes

The fowerth booke.

*Enterprised
maie the easel:
as be brought to
passe by mea-
nes of religio.*

Sertorius.

*A policie of
Silla.*

*A policie of
Charles the se-
venth king of
France against
the Englishme*

*How souldiers
maie bee made
to esteeme little
their enemies.*

*The sweetest way
to make souldiers
more ob-
stinat to fight*

*By what mean-
es obstinate-
nesse to fighte
is increased.*

those punishments, whiche might be feared of men,
but with those whiche of God might be looked for: the
whiche thyng mingled with the other Religious ma-
ners, made many tymes easie to the auncient capitai-
nes all enterprises, and will doe alwaies, where reli-
gion shall be feared, and obserued. Sertorius preuaile-
d, by declaring that he spake with a Stagge, the
whiche in Goddes parte, promised hym the victorie.
Silla saied, he spoke with an Image, whiche he had
taken out of the Temple of Apollo. Many haue tolde
how God hath appered vnto them in their slepe, who
hath admonished them to fight. In our fathers time,
Charles the seventh kyng of Fraunce, in the warre
whiche he made againste the Englishemen, saied, he
counsailed with a maide, sent fro God, who was cal-
led euery where the Damosell of Fraunce, the which
was occasion of his victorie. There maie be also vsed
meanes, that maie make thy men to esteeme little the
enemie, as Agesilao a Spartaine vsed, whom he led
to his souldiers, certain Persians naked, to the intent
that seying their delicate members, they should not haue
cause to feare them. Some haue constrained their me-
to fight through necessitie, takyng a waie from them
all hope of sauyng thei selues, sayng in overcom-
myng. The whiche is the strongest, and the beste pro-
uision that is made, to purpose to make the souldier
obstinate to fight: whiche obstinate-nesse is increased
by the confidence, and loue of the Capitaine, or of the
countrie. Confidence is caused through the armour,
the order, the late victorie, and the opinion of the Ca-
pitaine. The loue of the countrie, is caused of nature:
that of the Capitaine, through vertue, more then
by any other benefite: the necessities maie
be many, but that is strongest, whiche
constraineth thee, either to ou-
uercome, or to dye.

The

*The fifteth Booke of the Arte of warre,
of Nicholas Machianell, Citezeine
and Secretarie of Florence,
vnto Laurence Philip
Strozze.*

Fabritio.



I haue shewed you, how
an armie, is ordained to fight
a fild with an other armie,
whiche is seen pitched against
it, & haue declared vnto you,
howe the same is overcome,
and after many circumstanc-
es, I haue likewise shewed
you, what diuers chaunces,
maye happen about the same, so that me thinkes tyme
to shewe you now, how an armie is ordered, against
the same enemy, whiche otherwise is not seen, but con-
tinually feared, that he assaulte thee: this happeneth
when an armie marcheth through the enemies coun-
trie, or through suspected places. Firste, you must vn-
derstande, how a Romaine armie, sent alwaies ordi-
narily afoze, certayne bandes of hoysmen, as spies of
the waie: after followed the right hoysne, after this,
came all the carriages, whiche to the same appertei-
ned, after this, came a Legion, after it, the carriages
therof, after that, an other legion, and next to it, their
carriages, after whiche, came the left hoysne, with the
carriages thereof at their backs, and in the laste part,
followed the remnaunte of the chivalrie: this was in
effecte the maner, with whiche ordinarily they mar-
ched: and if it happened that the armie were assaulted

*How the Ro-
maines mar-
ched with their
armies.*

R. G. in

The fifteth booke.

How the maine
battails ought
to marche.

How the main
battails ought
to marche.

in the waile on the fronte, or on the backe, thei made
straight waile all the carriages to bee drawen, either
on the right, or on the leste side, accordyng as chaun-
sed, or as thei could beste, haupng respects to the situa-
cion: and all the men together free from their impedi-
mentes, made hedde on that parte, where the enemye
came. If thei were assaulted on the flankes, thei drew
the carriages towarde the same parte that was safe,
and of the other, thei made hedde. This waile beyng
well and prudently governed, I have thought meete
to imitate, sending afoze the light horsemen, as explo-
rators of the Countrey: Then haupng fower maine
battails, I would make them to marche in a rase, and
every one with their carriages following theim. And
soz that there be twoo sortes of carriages, that is par-
taining to particulare souldiours, and partaining to
the publike use of all the Campe, I would deuide the
publike Carriages into fower partes, and to every
maine battaille, I would appoint his parte, deuiding
also the artillerie into fower partes, and all the vna-
rmed, so that every number of armed menne, should e-
qually haue their impedimentes. But because it hap-
peneth some times, that thei marche through the cou-
ntrey, not onely suspected, but so dangerous, that thou
fearest every how to be assaulted, thou art constrai-
ned soz to go more sure, to change the forme of mar-
chyng, and to goe in soche wise prepared, that neither
the countrey menne, nor any armie, maye hurte thee,
findyng thee in any parte vnprovided. In soche case,
the aunciente capitaines were wont, to marche with
the armie quadrate, whiche so thei called this forme,
not soz that it was altogether quadrate, but soz that
it was apte to faight of fower partes, and thei safed,
that thei wente prepared, bothe soz the waile, and soz
the faight: from whiche waile, I will not digresse, and
I will ordaine my twoo maine battails, whiche I
haue take soz to make an armie of, to this effect. Min-
dyng

byng therfore, to marche safely throughe the enemies
Countrie, and to bee able to answer hym on every
side, when at unwaies the armie might chaunce to be
assaulted, and intending therfore, accordyng to the
antiquitie, to byng the same into a square, I would
deuise to make a quadrat, that the same therof should
be of space on every part. Clij. yardes, in this manner.
First I would put the flankes, distant the one flank
from the other, Clij. yardes, and I would place five
battailes for a flank, in a rale in length, and distant
the one from the other, two yardes and a quarter: the
whiche shall occupie with their spaces, every battaile
occupying thirtie yardes, Clij. yardes. When betwene
the hedde and the taile of these two flankes, I would
place the other tenne battailes, in every parte five, or-
dering them after soche sorte, that sower should ioyne
to the hedde of the right flank, and sower to the taile
of the lefte flank, leaning betwene every one of the,
a distance of thye yardes: one should after ioyne to the
hedde of the lefte flank, & one to the taile of the right
flank: and so that the space that is betwene the one
flank and the other, is. Clij. yardes, and these bat-
tailes whiche are set the one to the side of the other by
breadth, and not by length, will come to occupie with
the distaunces one hundred yardes and a halfe yarde,
there shall come betwene them sower battailes, pla-
ced in the fronte on the right flank, and the one pla-
ced in the same on the lefte, to remaine a space of fiftie
and eight yardes and a halfe, and the verie same
space will come to remaine in the battailes, placed in
the hinder parte: nor there shall bee no difference, sa-
ying that the one space shall come on the parte behind
to wardes the right horne, & thother shall come on the
parte afore, to wardes the lefte horne. In the space of
the. lviij. yardes and a halfe before, I would place all
the ordinarie Meliti, in the same behinde, the extraor-
dinarie, which will come to be a thousand for a space.

The ordering
of an armie af-
ter soche sorte,
that it maye
marche safelie
throughe the e-
nemies countrie
and be alwaies
in a readines to
fayght.

The place in
the armie wher
the bowmen and
markbutters
are appointed.

The fifteth booke.

and myndyng to haue the space that ought to be with
in the armie, to be euery waie. Clix. yardes, it is mete
that the fise battailes, whiche are placed in the hedde,
and those whiche are placed in the taile, occupie not a
ny parte of the space, whiche the flankes keepe: and
therfore it shall be conuenient, that the fise battailes
behinde, doe touche with the fronte, the taile of their
flankes, and those afoze, with the taile to touche the
hedde, after soche sorte, that vpon euery corner of the
same armie, there maie remaine a space, to receiue an
other battaile: and so; that there bee fower spaces, I
would take fower bades of the extrao;dinarie Bikes,
and in euery corner I would place one, and the twoo
Ansignes of the foresaied Bikes, whiche shall remain
ouerplus, I would sette in the middell of the rone of
this armie, in a square battaile, on the hedde whereof,
should stande the generall capitaine, with his menne
about him. And so; that these battailes ordeined thus,
marche all one waie, but faight not all one waie, in
puttyng them together, those sides ought to be ordein
ed to faight, whiche are not defended of thother bat
tailes. And therfore it ought to be considered, that the
fise battailes that be in the front, haue all their other
partes defended, excepte the fronte: and therfore these
ought to bee put together in good order, and with the
Bikes afoze. The fise battailes whiche are behinde,
haue all their sides defended, excepte the parte behinde,
and therfore those ought to bee put together in soche
wise, that the Bikes come behind, as in the place ther
of we shall shewe. The fise battailes that bee in the
right flank, haue all their sides defended, excepte the
right flank. The fise that be on the left flank, haue
all their partes defended, excepte the lefte flank: and
therfore in orderyng the battailes, thei ought to bee
made, that the Bikes maie tourne on the same flank,
that lieth open: and the Beticapitaines to stand on the
hedde, and on the taile, so that neddyng to faight, al the
armour

The place in
the armie where
the extrao;dinari
e Bikes are
appointed.

The place in
the armie where
the generall ca
pitaine must be.

armour and weapons maie be in their due places, the waie to doe this, is declared wher we reasoned of the maner of orderpng the battailes. The artillerie I would deuise, and one parte I would place without, on the lefte flank, and the other on the right. The light horsemen, I would sende afoze to discouer the countrie, Of the menne of armes, I would place part behinde, on the right hoine, and parte on the lefte, of stante about thirtie paces from the battailes: and concerning horse, you haue to take this for a general rule in euery condicion, where you ordeine an armie, that alwaies thei ought to be put, either behinde, or on the flankes of the same: be that putteth them afoze, ouer against the armie, it behoueth hym to doe one of these twoo thinges, either that he put them so moche afoze, that beyng repulced, thei maie haue so moche space, that maie giue them tyme, to be able to go a side from the footemen, and not to runne vpon them, or to order them in soche wise, with so many spaces, that the horses by those maie enter betwene them, without disorderpng them. For let no man esteeme little this remembrance, for as moche as many capitaines, whom hauing taken no heed thereof, haue been ruinated, and by themselves haue been disordered, and broken. The carriages and the unarmed menne are placed, in the some that remaineth within the armie, and in soche sorte equally deuised, that thei maie giue the waie easely, to whom so euer would go, either from the one corner to the other, or from the one hedde, to the other of the armie. These battailes without the artillerie and the horse, occupie euery waie from the vtter side, twoo hundred and eleven paces and a halfe of space: and bicause this quadrante is made of twoo main battailes, it is conuenient to distinguish, what part thone maine battaille maketh, and what the other: and for that the main battailes are called by the number, and euery of theim hath (as you knowe) tenne battailes, and

Where the artillerie must be placed.

The light horsemen must be sent before to discouer the countrie and the menne of armes to come behind them.

a general rule concerning horse.

Where the carriages and the unarmed are placed.

The fifteth booke

For a generall hed, I would cause that the first main battaile, should set the first, & battailes therof in the front, the other fve, in the left flank, and the capitaine of the same should stande in the left corner of the front. The seconde maine battaile, should then put the first fve battailes therof, in the right flank, and the other fve in the taile, and the hedde capitaine of the same, should stande in the right corner, whom should come to dooe the office of the Tergiductor. The armie ordained in this maner, ought to be made to move, and in the marching, to obserue all this order, and without doubt, it is sure from all the tumultes of the countrie men.

For the capitaine ought not to make other provision, to the tumultuarie assaults, then to giue sometyme Commission to some horse, or Ansigne of Velitt, that thei set themselves in order: nor it shall neuer happen that these tumultuous people, will come to finde thee at the drawing of the sword, or pikes pointe: for that men out of order, haue feare of those that be in arais: and alwaies it shall bee seen, that with cries and rumours, thei will make a greate assaulte, without otherwise commyng nere vnto thee, like vnto barking curres aboute a Pastie. Antball when he came to the hurte of the Romaines into Italie, he passed through all Fraunce, and alwaies of the French tumultes, he tooke small regarde. Winding to marche, it is conueniente to haue plainers and labourers afoze, whom make thee the waie plaine, whiche shall bee guarded of those horsemen, that are sent afoze to biewe the countrie: an armie in this order may marche tenne mille the daie, and shall haue tyme inough to incampe, and suppe befoze Sunne goyng doune, for that ordinarily, an armie may marche twentie mille: if it happen that thou be assaulted, of an armie set in order, this assaulte cannot growe sodainly: for that an armie in order, cometh with his pace, so that thou mayest haue tyme inough, to set thy self in order to saight the field,

and

The waie must
be made plaine
wher the armie
shall marche in
order.

How many
miles a day an
armie may
marche in bat-
tall rate, to be
able to incampe
before sunne set

and reduce thy menne quickly into thesame faction, as
like to thesame faction of an armie, which afoze is shew-
wed thee. For that if thou be assaulted, on the parte a-
foze, thou needest not but to cause, that the artillerie
that be on the flanches, and the hoise that be behinde,
to come befoze, and place themselves in those places,
and with those distaunces, as afoze is declared. The
thousande Meliti that bee befoze, must go out of their
place, and be deuided into. CCCC. for a parte, and
go into their place, betwene the hoise and the hoznes
of tharmy: then in the voide place that thei shal leaue,
the twoo Ansignes of the extraordinarie Pikes muste
entre, whiche I did set in the middelt of the quadante
of the armie. The thousande Meliti, whiche I placed
behinde, must departe from thesame place, and deuide
them selues in the flanches of the battailes, to the so-
tification of those: and by the open place that thei shal
leaue, all the carriages and vnarmed menne must go
out, and place themselves on the backe of the battaile.
Then the come in the middelt beyng voided, and e-
uery man gone to his place: the fūe battailes, whiche
I placed behinde on the armie, must make so ward in
the voide place, that is betwene the one and the other
flank, and marche towarde the battailes, that stand
in the hedde, and thzee of theim, muste stande within
thirtie yardes of those, with equall distaunces, betwene
the one and the other, and the other twoo shal remaine
behinde, distaunte other thirtie yardes: the whiche fa-
cion muste bee ordained in a sodaine, and commeth al-
moste to bee like, vnto the firste disposicion, whiche of
tharmy afoze we shewed. And though it come straigh-
ter in the fronte, it commeth grosser in the flanches,
whiche giueth it no lesse strength: but because the fūe
battailes, that be in the taile, haue the Pikes on the
hinder parte, for the occasion that befoze we haue de-
clared, it is necessarie to make theim to come on the
parte afoze, myndyng to haue theim to make a backe

The ordering
of the armie,
when it is as-
saulted on the
vaward.

the fūe battailes
muste be so placed
that they maye
be able to stande
the assaulte

the fūe battailes
muste be so placed
that they maye
be able to stande
the assaulte

The fifteth booke.

The ordering
of tharmie whē
thene mie com-
mes to assaulte
it behinde.

How the armie
is ordered whē
it is assaulted
of any of the
sides.

to the front of tharmie: & therfore it behoueth either to make the to tourne battaille after battaille, as a whole body, or to make the quickly to enter betwen the orders of targettes, & conduct them afoze, the whiche waie is moze speedy, & of lesse disorder, then to make the to turn al together: and so y^e oughtest to doe of all those, whiche remain behinde in every condicion of assault, as I shal shewe you. If it appere that the nemie come on y^e part behinde, the first thyng that ought to bee dooen, is to cause that every man tourne his face, where his backe stode, and straight waie tharmie cometh to haue made of taile, hed, & of hed taile: then al those waies ought to be kept, in ordering the same fronte, as I tolde afoze. If the enemy come to incounter the right flank, the face of thy armie ought to bee made to tourne towar- des the same side: after, make all those thynges in so- tification of the same hedde, whiche aboue is said, so that the horsemen, the Meliti, and the artillerie, make be in places conforable to the hed thereof: onely you haue this difference, that in varyng the hed of those, which are transposed, some haue to go moze, and some lesse. In dedde making hedde of the right flank, the Meliti ought to enter in the spaces, that bee betwene the hoine of the armie, and those horse, whiche were nearest to the lefte flank, in whose place ought to en- ter, the twoo Ansignes of the extraordinarie Bikes, placed in the middest: But firste the carrriages and the unarmed, shall goe out by the open place, avoidyng the come in the middest, and retiryng themselves be- hinde the lefte flank, whiche shall come to bee then the taile of the armie: the other Meliti that were pla- ced in the taile, accordyng to the principall ordering of the armie, in this case, shall not moue: Because the same place should not remaine open, whiche of taile shall come to be flank: all other thyng ought to bee dooen, as in ordering of the firste hedde is said: this that is told about the making hed of the right flank,

must

must be vnderstande to be told, hauyng neede to make it
of the left flank: so that the very same order ought to
bee obserued. If the enemy should come glose, and in
order to assaulte thee on twoo sides, those twoo sides,
whiche he commeth to assaulte thee on, ought to bee
made stronge with the other twoo sides, that are not
assaulted, doublyng the others in eche of theim, and
deuidyng so bothe partes the artillerie, the Maliti,
and the horse. If he come on three or on fouer sides, it
is necessarie that either thou or be lacke prudence: so
that if thou shalt bee wise, thou wilt neuer putte thy
self in place, that the enemy on three or fouer sides,
with a greate number of men, and in order, make as-
saulte thee: so that myndyng, safely to hurte thee, it is
requisite, that he be so great, that on euery side, he make
assaulte thee, with as many men, as thou haste almoste
in al thy army: and if thou be so brwise, that thou put
thy self in the danger and force of an enemy, whom
thou hath three tymes more menne obtained then thou, if
thou catche hurte, thou canste blame no man but thy
self: if it happen not through thy faulte, but through
some mischance, the hurt shall be without the shame,
and it shall chaunce vnto thee, as vnto the Scipions in
Spaine, and to Asdruball in Italie: but if the enemy
haue not many more men then thou, and intende so
to disorder thee, to assaulte thee on diuers sides, it shall
be his foolishnesse, and thy good fortune: so as moche
as to doe so, it is conuenient, that he become so thinne
in soche wise, that then easily thou maiste ouerthrow
one bande, and withstande an other, and in short time
ruinate him: this maner of ordering an armie against
an enemy, whiche is not seen, but whiche is feared,
is a necessarie and a profitable thing, to accustome thy
souldiours, to put themselves together, and to march
with soche order, and in marchyng, to order theimselfe
ues to fight, accordyng to the first hedde, and after to
retourne in the same, that they marched in, then to

What is to be
done when the
army is assaulte
d on twoo
sides.

What is to be
done when the
army is assaulte
d on twoo
sides.

The fifteth booke.

Take heed of the taile, after, of the flankes, from these, to retourne into the first fashion: the which exercise and uses bee necessarie, minding to haue an armie, thoroughly instructed & practised: in which thing the Princes and the capitaines, ought to take paine. For the discipline of warre is no other, then to knowe how to commaunde, and to execute these thynges. For an instructed armie is no other, then an armie that is wel practised in these orders: no: it cannot be possible, that who so euer in this time, should vse like discipline shall euer bee broken. And if this quadrante forme which I haue shewed you, is somewhat difficulte, soche difficultnesse is necessarie, taking it for an exercise: for as moche as knowyng well, how to set them selues in order, and to maintaine them selues in the same, they shall knowe after moze easely, how to stand in those, which should not haue so moche difficultie.

Zanbi. I beleue as you saie, that these orders bee necessarie, and I for my parte, knowe not what to adde or take from it: true it is, that I desire to know of you two thynges, the one, if when you will make of the taile, or of the flanke heed, and would make them to tourne, whether this be commaunded by the voice, or with the sounne: the other, whether those that you sende afoze, to make plain the waie, for the armie to marche, ought to be of the verte same souldiours of your battailles, or other wile menne appointed, to like exercise.

Fabritio. Your firste question importeth moche: for that many tymes the commaundementes of Capitaines, being not well understood, or euill interpreted, haue bene deere to their armie: therefore the voices, with the which the commaunde shalperilles, ought to bee cleare, and note. And if thou commaunde with the sounne, it is convenient to make, that betwene the one waie and the other, there be so moche difference, that the one cannot be chaunged for the other: and if thou

Commaundementes of Capitaines being not well understood, maye be the destruction of an armie.

Respect that is to be had in commaundementes made with the sounne of the Trompet,

com

commaundest with the voice, thou oughtest to take heede, that thou hee the general voices, and to vse the particulars, & of the particulars, to hee those, whiche may be interpreted sinisterly. Many tymes the sayng backe, backe, hath made to ruinate an armie: therfore this voice ought not to be vsed, but in steede thereof to vse, retire you. If you will make theim to tourne, so to chaunge the hedde, either to flank, or to backe, vse neuer to saie tourne you, but saie to the leste, to the right, to the backe, to the front: thus all the other voices ought to be simple, and nete, as thrust on, march, stande stronge, so warde, retourne you: and all those thynges, whiche may bee dooen with the voice, thei doe, the other is dooen with the sounde. Concernyng those menne, that must make the waies plaine for the armie to marche, whiche is your seconde question, I would cause my owne souldiours to dooe this office, as well bicause in the aunciente warfare thei did so, as also so; that there should be in the armie, lesser number of unarmed men, and lesse impedimentes: and I would choose out of euery battaile, thesame number that should nede, and I would make theim to take the instrumentes, meete to plaine the grounde withall, and their weapons to leaue with those rankes, that should bee nereste them, who should carrie them, and the enemye commyng, thei shall haue no other to doe, then to take the again, & to retourne into their arais.

Zanobi. Who shall carrie the instrumentes to make the waie plaine withall?

Fabricio. The Cartes that are appoynted to carrie the like instrumentes.

Zanobi. I doubt whether you should euer bypunge these our souldiours, to labour with shouell or Mattocke, after soche sorte.

Fabricio. All these thynges shall bee reasoned in the place thereof, but now I will let alone this parte, and reason of the maner of the victualing of the armie: so

In commandmentes made with the voice, what respect is to be had.

Of Plaines.

The fift booke.

that me thinketh, hauing so moche trauailed theim,
it is tyme to refrefhe them, and to comfort them with
meate. You haue to vnderstande, that a Prince ought
to ordaine his armie, as expedite as is possible, & take
from thesame all those thynges, whiche maye cause a-
ny trouble or burthen vnto it, and make vnto hym a-
ny enterpryse difficulte. Amongest those thynges that
causeth mooste difficultie, is to be constrained to keepe
the armie prouided of wine, and baked breade. The an-
tiquitie cared not for Wine, for that lackyng it, thei
dranke water, mingeled with a little vinegre, to giue
it a taste: For whiche cause, among the munitions of
bictualles for the hoste, vineger was one, & not wine.
Thei baked not the breade in Ovens, as thei vse for
Cities, but thei prouided the Peale, and of thesame,
euery Souldiour after his owne maner, satisfied hym
self, hauing for condiments Larde and Baken, the
whiche made the breade sauerie, that thei made, and
maintained theim strong, so that the prouision of vic-
tualles for the armie, was Peale, Vineger, Larde,
and Bacon, and for the horses Barley. Thei had or-
dinarely herdes of greate beastes and small, whiche
folowed the armie, the whiche hauing no nede to bee
carried, caused not moche impedimente. Of this order
there grew, that an armie in old time, marched som-
tymes many daies through solitarie places, and diffi-
culte, without sufferynge disease of victualles: so that
thei liued of thynges, whiche easely thei might conuey
after them. To the contrarie it happeneth in the ar-
mies, that are now a daies, whiche myndyng not to
lacke wine, and to eate baked breade in thesame ma-
ner, as when thei are at home, whereof beyng not a-
ble to make prouision long, thei remaine often tymes
famished, or though thei be prouided, it is dooen with
disease, and with mooste greate coste: therfore I would
reduce my armie to this maner of liuing: and I would
not that thei should eate other breade, then that, which
by

The victualles
that antiquitie
vse made prou-
ision of, for their
armies.

by themselves they should bake. Concernyng wine, I would not prohibite the drincking thereof, nor yet the commyng of it into the armie, but I would not be indeuour, nor any labour for to haue it, & in the other prouisions, I would gouerne my self altogether, like vnto the antiquitie: the whiche thing, if you consider well, you shall see how moche difficultie is taken a waie, and how moche trouble and disease, an armie and a capitaine is auoided of, and how moche commoditie shall bee giuen, to what so euer enterpryse is to bee dooen.

Zanobi. We haue overcome thenemie in the field, marched after ward vpon his countrie, reason would, that spoiles be made, townes sacked, prisoners taken, therefore I would knowe, how the antiquitie in these thynges, gouerned them selues.

Fabritio. Beholde, I will satisfie you. I beleue you haue considered, for that once alreadie with some of you I haue reasoned, howe these present warres, impouerishe as well those lordes that overcome, as those that lesse: for that if the one leese his estate, the other leese his money, and his manables: the whiche in olde tyme was not, for that the conquerour of the warre, wared ritche. This groweth of keepyng no compte in these daies of the spoiles, as in olde tyme they did, but they leaue it to the discreacion of the souldiours. This manner maketh twoo moke great disorders: the one, that whiche I haue tolde: the other that the souldiour becometh moze couetous to spoyle, and lesse obserueth the orders: and manie times it hath been seen, howe the couetousnesse of the praye, hath made those to leese, whome were victorions.

Therefore the Romanes whiche were princes of armies, prouided to the one and to the other of these inconuenienses, ordainyng that all the spoyle should appertaine to the publicke, and that the publicke after should bestowe it, as shoulde be thought good: and

there

The occasions why the lordes made not we adates, doe impouerishe the conquerors as well as the conquered.

The order that the Romanes tolke, concerning the spoyle and the booties that their souldiours gotte.

The fuetb booke

therfoze thei had in tharmie the queffours, who were as we would fay, the chamberlaines, to whose charge all the spoyle and booties were committed: whereof the consull was serued to geue the ordinarie pay to the souldiours, to succour the wounded, and the sicke, and for the other businesse of the armie. The consull wight well, and he vfed it often, to graunte a spoyle to souldiours: but this grauntynge, made no disorder: for that the armie beyng broken, all the pray was put in the middell, and distributed by hedde, accorbyng to the qualitee of euerie man: the which maner thei constituted, to thintente, that the souldiours should attend to ouercome, and not to robbe: and the Romaine Legions ouercame the enemies, and solowed them not, for that thei neuer departed from their orders: onely there solowed them, the horsemenne with those that were light armed, and if there were any other souldiours then those of the legions, they likewise pursued the chase. Where if the spoyle shoulde haue ben his that gotte it, it had not ben possible nor reasonable, to haue kepte the legions steddie, and to withstonde manie perils: hereby growe therfoze, that the common weale inritched, and euery Consull carried with his triumphe into the treasure, muche treasure, whiche all was of booties and spoiles. An other thing the antiquitie did vpon good consideration, that of the wages, whiche they gaue to euery souldiour, the thirde parte they woulde shoulde be laied vp nexte to him, whome carried the ansigne of their bande, whiche neuer gaue it them againe, befoze the warre was ended: this thei did, beyng moued of twoo reasons, the first was to thintente, that the souldiour should thynke by his wages, because the greatest parte of them beyng ponge men, and carelesse, the more thei haue, so muche the more without neede thei spende, the other cause was, for that knowyng, that their mouabellies were nexte to the ansigne, thei shoulde be constrained to

An order that
the antiquitie
tooke, concernyng
their souldiours
wages.

to haue moze care thereof, and with moze obstinate-
nesse to defende it: and this made them stronge and
to holde together: all which thynges is necessarie to
obserue, purposinge to reduce the exercise of armes
vnto the intier perfection therof.

Zanobi. I beleene that it is not possible, that to an
armie that marcheth from place to place, there shal not
perillous accidentes, where the industrie of the capti-
taine is needefull, and the worthinesse of the souldi-
ours, myndyng to auoyde them. Therefore I woulde
be glad, that you remembryng any, would shew them.

Fabritio. I shall contente you with a good will, be-
yng inespetsially necessarie, intendyng to make of this
exercise a perfecte science. The Capitaines ought a-
boue all other thynges, whileste thei marche with an
armie, to take heed of ambusshes, wherein they in-
curre daunger twoo wayes, either marchynge thou
entrest into them, or thozoughe crafte of the enemye
thou arte trained in besoze thou arte aware. In the
first case, myndyng to auoide suche perill, it is necessa-
rie to sende afoze double warde, whome may disco-
uer the countrey, and so muche the moze diligence
ought to be vsed, the moze that the countrey is apte
foz ambusshes, as be the woddie or hilly countries, soz
that alwaies thei be layd either in a wodde, or behind
a hille: and as the ambusshes not fozeene, doeth ruin
thee, so fozeing the same, it cannot hurte thee. Ma-
nie tymes birdes or muche duffe haue discovered the
enemye: soz that alwayes where the enemye cometh
to finde thee, he shall make great duffe, whiche shall
signifie vnto thee his comyng: so often tymes a Ca-
pitaine seying in the places where he ought to passe,
Doves to rise, or other of those birdes that fle in floc-
kes, & to tourne aboute and not to light, hath knowen
by the same the ambusshes of the enemyes to be there,
and sendyng besoze his men, and certainly vnder-
standyng it, hath saued him selfe and hurte his ene-
mye.

Captaines may
incurr the dan-
ger of ambus-
shes twoo man-
ner of wayes.

How to auoide
the perill of
ambusshes.

Howe ambus-
shes haue ben
perceiued.

The fūeth booke.

misle. Concernyng the seconde case, to be trained in,
 (whiche these our men cal to be drawe to the shot) you
 ought to take heede, not straight way to beleue those
 thinges, which are nothyng reasonable, y^e thei be as
 they seeme: as shoulde be, if the enemye should set a-
 foze thee a p^raie, thou oughtest to beleene that in the
 same is the hooke, and that therein is hid the deceipt.
 If many enemyes be drawen away by a fewe of thine,
 if a fewe enemyes assaulte manie of thine, if the ene-
 mies make a sodeine flight, and not standyng with
 reason, alwaies thou oughtest in suche cases to feare
 deceipt, & oughtest neuer to beleue that the enemye
 knoweth not how to doe his businesse, but rather in-
 tending that he may begyle thee the lesse, & myndyng
 to stand in lesse perill, the weaker that he is, & the lesse
 craftier that the enemye is, so muche the more thou
 oughtest to esteeme him: and thou muste in this case
 vse twoo sundrie poyntes, so; that thou oughtest to
 feare him in thy minde and with the order, but with
 wordes, and with other outewarde demonstracion,
 to seeme to dispyse him: because this lastte way, ma-
 keth that thy souldiours hope the more to haue the vic-
 torie: the other maketh thee more warie, & lesse apte
 to be begyled. And thou hast to vnderstand, that when
 men marche thozoughe the enemyes countrey, they ar
 in muche more, and greater perills, then in sayghtyng
 the felde: and therefore the Capitaine in marchyng,
 ought to vse double diligence: and the first thyng that
 he ought to doo, is to get described, and paynted oute
 all the countrie, thozough the which he must marche,
 so that he maye know the places, the number, the di-
 stances, the waies, the hilles, the riuers, the fennes;
 and all the qualities of them: and to cause this to bee
 knowen, it is conuenient to haue with him diuersly, &
 in sundrie maners such men, as know the places, and
 to aske them with diligence, and to se whether their
 talke, agree and acco;dyng to the agreyng therof, to
 note

How the Ca-
 pitaine of the
 enemyes ought
 to be esteemed.

Where int be
 in greatest per-
 ill.

The descriptio
 of the countrey
 where an army
 must marche,
 is most requi-
 sit for a Cap-
 itaine to haue.

note : he oughte also to sende afoze the hoysenmen, and with them prudente heddes, not so muche to discover the enemye, as to viewe the countrey, to se whether it agree with the description, and with the knowledge that they haue of the same. Also the guydes that are sente, ought to be kepte with hope of rewarde, & feare of paine. And aboue all thynges it ought to be provided, that the armie knowe not to what businesse he leadeth them : so; that there is nothyng in the warre moze profitable, then to keepe secret the thynges that is to be dooen : and to thintente a suddaine assaulte dooe not trouble thy soldiours, thou oughteste to see them to stande redde with their weapons, because the thynges that ar provided so; offend lesse. Manie so; to auoyde the confusion of marchyng, haue placed vnder the standerde, the carriages, and the vnarmed, and haue commaunded them to folow the same, to the intent that in marchyng needyng to stape, o; to retire, they might dooe it moze easely, which thyng as profitable, I allowe very muche. Also in marchyng, aduertismente ought to be had, that the one parte of the armie goe not a sunder from the other, o; that thoughe some goyng fast, and some softe, the armie become not slender : the whiche thynges, be occation of disorder : therfoze the heddes muste be placed in suche wise, that they may maintaine the pace even, causing to goe softe those that goe to fast, and to haste so; ward the other that goe to slowe, the whiche pace can not bee better ruled, then by the stroke of the drumme. The waies ought to be caused to be enlarged, so that alwaies at least a bande of. iij. hundred men may marche in order of battaile. The custome and the qualite of the enemye ought to be considered, & whether that he will assaulte thee either in the mornyng, o; at none o; in the euenyng, & whether he be moze puissant w; footemen o; hoysenmen, & accordyng as y vnderstandest, to ordeine and to provide so; thy self. But let vs come

A most profitable thyng it is for a capitayne to be secrete in al his affaires.

An aduertisment concerning the marchyng of an armie.

The marchyng of an armie ought to be ruled by the stroke of the drumme.

The condicions of the enemye ought to be considered.

The fifteth booke.

to some particular accidents. It hapneth sometime, that thou gettingyng from the enemy, because thou iudgest thy selfe inferiour, and therefore myndynge not to fight with him, and he comyng at thy backe, thou arisest at the banks of a riuer, passyng ouer the which, asketh time, so that the enemy is redie to ouertake thee and to fight with thee. Some, which chausyng to bee in suche perill, haue inclosed their armie on the hinder parte with a dicke, and fylling the same full of towne, and firyng it, haue then passed with the armie without beyng able to be letted of the enemy, he beyng by the same fire y^e was betwene them held backe.

Annone of Carthage.

Zanobi. I am hard of beliefe, that this fyre coulde stay them, in especially because I remember that I haue hard, howe Annone of Carthage, beyng besieged of enemies, inclosed him selfe on the same parte, wth towne, which he did set on fire where he purposed to make eruption. Wherefore the enemies beyng not intentiue on the same parte to looke to him, he made his armie to passe ouer the same flame, causyng euery man to holde his Target befoze his face soz to defend them from the fire, and smoke.

Annone of Carthage.

Annone of Carthage.

Fabricio. You saye well: but consider you howe I haue saied, and howe Annone did: soz as muche as I saied that they made a dicke, and filled it with towne, so that he, that woulde passe ouer the same, shoulde be constrained to contende with the dicke and with fire: Annone made the fire, without the dicke, and because he intended to passe ouer it, he made it not great, soz y^e other wise wthout the dicke, it shoulde haue letted him. Dose you not knowe, that Fabide a Spartan beyng besieged in Sparta of the Romaines, set fire on parte of his towne to let the way to the Romaines, who al redie wer entred in: And by means of the same flame not onely hindered their way, but dyane them out: but let vs turne to our matter. Quintus Luttatius a Romaine, hauyng at his backe the Cimby, and comyng

myng to a riuer, to thetente the enemye should giue him time to passe ouer, semed to geue time to them to fight with him: and therfoze he fained that he would lodge there, and caused trenches to be made, and certayne pavillions to be created, and sent certayne horsemen into the countrie so; so; redge: so that the Cimbryse beleuyng, that he incamped, they also incamped, and deuided them selues into sundye partes, to prouide so; victuals, wherof Luttatius being aware, passed the riuer they beyng not able to let him. Some so; to passe a riuer hauinge no brydge, haue deuided it, and one parte they haue turned behynde their backs, & the other then becomynge shalower, with ease they haue passed it: when the riuers be swift, purposyng to haue their footemen to passe safely, they place their strongest horses on the higher side, that they may sustain the water, and an other parte be lowe y may succour the men, if any of the riuer in passyng should be ouercome with the water: They passe also riuers, that be verie deepe, with brydges, with botes, & with barrelles: & therfoze it is good to haue in a readinesse in an armie wherewith to be able to make all these thynges. It fortuneth sometime that in passyng a riuer, the enemye standynge agaynst thee on the other banke, doeth let thee: to minde to ouercome this difficultie, I know not a better insample to solow, then the same of Cesar, whome hauinge his armie on the banke of a riuer in Fraunce, and his passage beyng letted of Aergintoize a Frenche man, the whiche on the other side of the riuer had his men, marched many daies a longe the riuer, and the like did the enemye: wherfoze Cesar incamping in a woddie place, apte to hide men, he tooke out of euery legion thre cohorthes, and made them to tarie in the same place, commaundyng theim that so soone as he was departed, they shoulde caste ouer a brydge, and shoulde fortifie it, and he with his other menne folowed on the waye: wher

Quintus Luttatius pollicie to passe ouer a riuer.

How to passe a ryuer without a brydge.

A pollicie of Cesar to passe a riuer, where his enemye beyng on the other side thereof sought to lette hym.

The fift booke

foze Vergintioſige ſeyng the number of the legions, thinking that there was not left anie parte of theim behinde, folowed alſo his way: but Ceſar when he ſuppoſed that the brydge was made, tourned backwarde, and ſyndynge all thynges in order, paſſed the riuer without difficultee.

Zanobi. Haue ye any rule to know the ſoordes:

How to know
the ſoordes of
a riuer.

Fabritio. Yea, we haue: alwaies the riuer, in that parte, whiche is betwene the water, that is ſilleſte, and the water that runneth faſteſt, there is leaſt depth and it is a place moze meete to be looked on, then any other where. For that alwaies in theſame place, the riuer is moſte ſhalloweſt. The whiche thyng, bicauſe it hath been proued many tymes, is moſte true.

Zanobi. If it chaunce that the Riuer haue made the ſoorde, ſo that the hoſes ſinke, what remedye haue you?

Fabritio. The remedie is to make hardels of roddeſ whiche muſt be placed in the bottome of the riuer, & ſo to paſſe vpon thoſe: but let vs ſolowe our reaſonyng. If it happē that a capitaine be led with his armie, betwene two hilles, & that he haue not but two waies to ſaue hymſelf, either that befoze, or that behinde, & thoſe being beſet of the enemies, he hath ſo remedie to doe the ſame, which ſome haue doen heretofore: y whiche haue made on their hinder parte a greate trenche, difficult to paſſe ouer, and ſemed to the enemye, to mynde to kepe him of, ſo to be able with al his power, without nedynge to feare behinde, to make ſorce that waie, whiche befoze remaineth open. The whiche the enemies beleuyng, haue made theim ſelues ſtronge, towardeſ the open parte, and haue ſoſaken the incloſed, and he then caſtyng a brydge of woode ouer the Trenche, ſo ſoche an effect prepared, bothe on theſame parte, without any impediement hath paſſed, and alſo deliuered hymſelf out of the handes of the enemye. Lucius Pinutus a Conſul of Rome, was in Liguria with an armie

Howe to eſ-
cape out of a
ſtraight where
the ſame is be-
ſette with ene-
mies.

Howe Lucius
Pinutus eſca-
ped out of a

armie, and was of the enemies inclosed, betwene certaine hilles, whereby he could not go out: therefore he sente certaine souldiours of *Numidia* on horsebacke, whiche he had in his armie (whom were euill armed, and vpon little leane horses) towarde the places that were kepte of the enemies, who at the first sight made the enemies, to order theim selues together, to defende the passage: but after that thei sawe those men ill apointed, & accorpyng to their facion euill horsed, regardyng theim little, enlarged the orders of their warde, wherof so sone as the *Numidians* wer a ware, giuyng the spurres to their horses, and runnyng violently vpon theim, passed befoze thei could prouide any remedy, whom beyng passed, destroyed and spoiled the countrie after soche sorte, that thei constrained the enemies, to leaue the passage free to the armie of *Lucius*. Some capitaine, whiche hath perceiued hymself to be assaulted of a greate multitude of enemies, hath drawn together his men, and hath giuen to the enemye commoditie, to compasse hym all about, and then on the same part, whiche he hath perceiued to be mosse weake, hath made force, and by the same waie, hath caused to make waie, and saued hymself.

Marcus Antonius retiryng befoze the armie of the *Parthians*, perceiued how the enemies euery daie befoze Sunne risyng, when he remoued, assaulted him, and all the waie troubled hym: in so moch, that he determined not to departe the nexte daie befoze *Pone*: so that the *Parthians* beleuing, that he would not remoue that daie, returned to their tentes. Whereby *Marcus Antonius* might then all the reste of the daie, marche without any disquietnesse. This self same man so: to auoide the arrowes of the *Parthians*, commaunded his men, that when the *Parthians* came to warres them, thei should knele, and that the second ranke of the battailes, should couer with their *Targaettes*, the heddes of the firste, the thirde, the seconde, the fourth,

strayght where in he was inclosed of his enemies.

Howe some Capitaynes haue suffered them selues to be compassed a bout of their enemies.

A policie of *Marcus Antonius*.

A defence for the shotte of arrowes.

The fourth booke.

werth, the third, and so successiue, that all the armie came, to be as it were vnder a penthouse, and defended from the shotte of the enemies. This is as moche as is come into my remembraunce, to tell you, which maye happen vnto an armie marchyng: therefore, if you remember not any thyng els, I will passe to an other parte.

The sixthe Booke of the Arte of warre,
 of Nicholas Machiauell, Citezeine
 and Secretarie of Florence,
 vnto Laurence Philip
 Strozze.

Zanobi.



Beleue that it is good,
 seying the reasonyng must be
 chaunged, that Baptiste take
 his office, and I to resigne
 myne, and wee shall come in
 this case, to imitate the good
 Capitaines (accoording as I
 haue nowe here vnderstoode
 of the gentilman) who place

the beste souldiours, before and behinde the armie, se-
 myng vnto theim necessarie to haue before, soche as
 maie lustely beginne the saight, and soche as behinde
 maie lustely sustaine it. Now seying Cosmus began
 this reasonyng prudently, Baptiste prudently shall
 ende it. As so; Luigi and I, haue in this middeste in-
 tertained it, and as euery one of vs hath take his part
 willingly, so I beleue not, that Baptiste will refuse it.

Baptiste. I haue let my self been gouerned hether to,
 so I minde to doe still. Wherfore be contente sir, to fol-
 lowe your reasonyng, and if we interrupte you with
 this practise of ours, haue vs excused.

Fabritio. You doe me, as all readie I haue saied, a
 mooste greates pleasure: so; this your interrupting me,
 taketh not awale my fantasie, but rather refretheth
 me. But myndyng to followe our matter I saie, how
 that it is now tyme, that we lodge this our armie, so;

The sixte booke.

that you knowe euery thyng desireth reſte and ſaſſte, bicauſe to reſte, and not to reſte ſaſely, is no perfect reſte: I doubt moche, whether it hath not been deſired of you, that I ſhould firſt haue lodged them, after made theim to marche, and laſte of all to ſaigbt, and we haue doen the contrary: whereunto neceſſitie hath brought vs, ſo; that intending to ſhewe, how an armie in going, is reduced from the ſozme of marching, to theſame maner of ſaighting, it was neceſſarie to haue firſt ſhewed, how thei ordered it to ſaigbt. But turning to our matter, I ſaie, that minding to haue the Campe ſure, it is requiſite that it be ſtrong, and in good order: the induſtrie of the Capitaine, maketh it in order, the ſituacion, or the arte, maketh it ſtronge. The Grekes ſought ſtrong ſituacions, no; thei would neuer place theim ſelues, where had not been either caue, or bancke of a riuer, or multitude of trees, or other naturall fortification, that might defende theim: but the Romaines not ſo moche incaped ſafe through the ſituacion, as through arte, no; thei would neuer incampe in place, where thei ſhould not haue been able to haue ranged all their bandes of menne, according to their diſcipline. Whereby growe, that the Romaines might kepe alwaies one ſozme of incamping, ſo; that thei would, that the ſituacion ſhould bee ruled by the, not thei by the ſituacion: the which the Grekes could not obſerue, ſo; that being ruled by the ſituacion, and varying the ſituacion and ſozme, it was conueniente, that alſo thei ſhould varie the maner of incamping, and the ſacion of their lodgings. Wherefore the Romaines, where the ſituacion lacked ſtrength thei ſupplied theſame with arte, and with induſtrie. And ſo; that I in this my declaration, haue willed to imitate the Romaines, I will not departe fro the maner of their incamping, yet not obſeruyng altogether their order, but taking theſame parte, whiche ſenneth vnto me, to be mete ſo; this preſent tyme. I haue told

you

How the Grekes incamped.

How the Romaines incamped.

you many tymes, how the Romaines had in their ch:
full armies, two Legions of Romaine men, whiche
were aboute a leuen thousande footemen, and sixe hu:
dred hoysenmen, and mozeouer thei had an other leuen
thousande footemen, sente from their frendes in their
aide: no; in their armie thei had neuer moze souldiers
that were straungers, then Romaines, excepte hoysen:
menne, whom thei cared not, though thei were moze
in number then theirs: and in all their doynges, thei
did place their Legions in the middeste, and the al:
ders, on the sides: the whiche maner, thei obserued
also in incampynge, as by your self you maie rede, in
those authoures, that wryte of their actes: and there:
fore I purpose not to shewe you distynally how thei in:
camped, but to tell you onely with what order, I at
this ptesente would incampe my armie, whereby you
shall then knowe, what parts I haue taken out of the
Romaine maners. You knowe, that in stede of two
Romaine Legions, I haue taken two maine battail:
les of footemen, of sixe thousande footemen, and thre
hundred hoysenmen, profitable for a maine battaille,
and into what battailles, into what weapons, into
what names I haue deuised theim: you knowe howe
in orderynge tharmie to marche, and to saight, I haue
not made mencion of other men, but onely haue shew:
ed, how that doublynge the men, thei neded not but
to double the orders: but myndynge at this ptesente, to
shew you the maner of incampynge, me thinketh good
not to stande onely with two maine battailles, but to
brynge together a iuste armie, made like vnto the Ro:
maines, of two maine battailles, and of as many mo
aldynge men: the whiche I make, to the intent that the
forme of the incampynge, maie be the moze perfect, by
lodgynge a perfecte armie: whiche thyng in the other
demonstracions, hath not semed vnto me so necessa:
rie. Purposynge then, to incampe a iuste armie, of. xxiij.
thousande footemen, & of two thousande good hoysen:
men,

The maner of
the incampynge
of an armie.

U. ij.

The sixte booke.

The lodging
for the generall
capitaine.

menne, beeyng deuised into fower maíne battalies;
twoo of our owne menne, and twoo of straungers, I
would take this waie. The situation beeyng founde,
where I would incampe, I would create the hed stand-
darde, and aboute it, I would marke out a quadzant;
whiche should haue euery side distaunte from it. xxxvij.
yardes and a half, of whiche euery one of them should
lye, towarde one of the fower regions of heauen, as
Easte, Weste, Southe, and North: betwene the whi-
che space, I would that the capitaines lodgyng should
be appointed. And bicause I beleue that it is wisdō,
to deuide the armed from the vnarmed, seyng that so,
so; the mooste parte the Romaynes did, I would there-
fore seperate the menne, that were cumbered with a-
ny thing, from the vncumbered. I would lodge all, or
the greatestt parte of the armed, on the side towarde
the Easte, and the vnarmed, and the cumbered, on the
Weste side, makyng Easte the hedde, and Weste the
backe of the Campe, and Southe, and North, should
be the flankes: and so; to distinguish the lodgynges
of the armed, I would take this waie. I would drawe
a line from the hedde standarde, and lead it towarde
the Easte, the space of. CCCC.r. yardes and a half:
I would after, make two other lines, that should place
in the middeste the same, and should bee as longe as
that, but distaunte eche of them from it a leuen yardes
and a quarter: in the ende whereof, I would haue the
Easte gate, and the space that is betwene the twoo vt-
termooste lines, should make a waie, that should go fro
the gate, to the capitaines lodgyng, whiche shall come
to be. xxij. yardes and a halfe broad, and. CCCC.lxxij.
yardes and a halfe longe, so; the. xxxvij. yardes and a
halfe, the lodgyng of the Capitaine will take vp: and
this shall bee called the Capitaine waie. When there
shall be made an other waie, from the Southe gate, to
the North gate, and shall passe by the hedde of the ca-
pitaine waie, and leaue the Capitaines lodgyng to-
warde

wardes theaste, whiche waie shalbe. *xx. rrrvj. yarde*
des & a halfe long (for the length thereof wilbe as moche
 as the breadth of all the lodgynges) & shall likewise be
rrj. yarde & a half broad, and shalbe called the crosse
 waie. Then so sone as the Capitaines lodgyng, were
 appointed out, and these twoo waies, there shall bee
 begun to be appointed out, the lodgynges of our own
 two main battailes, one of the whiche, I would lodge
 on the right hand of the capitaines waie, & the other,
 on the lefte: and therefore passing ouer the space, that
 the breadth of the crosse waie taketh, I would place
rrj. lodgynges, on the lefte side of the capitain waie,
 and. *rrj.* on the right side, leanyng betwene the. *xxi.*
 and the. *rvj.* lodgyng, a space of. *xxi. yarde* & a halfe,
 the whiche should serue for a waie ouerthwart, whi-
 che should runne ouerthwarte, throughout all the
 lodgynges of the maine battailes, as in the distribu-
 tyng of them shall bee seene.

Of these twoo orders of lodgynges in the begin-
 nyng of the head, whiche shall come to toygne to the
 crosse waie, I would lodge the Capitaine of the men
 of armes, in the. *rv.* lodgynges, which on euerie side
 soloweth next, their men of armes, where eche main
 battaile, haunyng a. *cl.* men of armes, it will come
 to ten men of armes for a longyng. The spaces of the
 Capitaines lodgynges, should be in bredth. *rrr.* and
 in length. *vij.* yarde & a halfe. And note that when
 so ever I sai bredeth, it signifieth the space of the mid-
 dle from South to North, and sayng length, that
 whiche is from Weste to East. Those of the men of
 armes, shoulde be. *xl.* yarde and a quarter in length,
 and. *xxi.* yarde and a halfe in bredeth. In the other
rv. lodgynges, that on euerie syde should solowe, the
 whiche should haue their beginnyng on the other side
 of the ouerthwarte way, and whiche shall haue the
 very same space, that those of the men of armes had,
 I would lodge the light horsemen: wherof beyng a

l. iij. hundred

The lodgyngs
 for the men of
 armes, & their
 Capitaine.

Note, which is
 bredth and
 whiche length
 in the square
 campe.

The lodgyngs
 for the light
 horsemen, and
 their capitaine.

The sixte booke

hundred and fiftie, it will come to . x . horsemen for a lodging, and in the . xvj . that remaineth, I would lodge their Capitaine, geuyng him the verie same space, that is geuen to the Capitaine of the men of armes: and thus the lodgings of the horsemen of two maine battailes, will come to place in the middest the Capitaine way, and geue rule to the lodgings of the footemen, as I shall declare. You haue noted how I haue lodged the . CCC . horsemen of euerie maine battaile with their Capitaines, in . xxxij . lodgynges placed on the Capitaine wale, hauynge begun from the crosse wale, and how from the . xvi . to the . xvii . there remaineth a space of . xxij . yardes and a halfe, to make a wale ouerthwarte. Bindyng therefore to lodge the . xx . battailes, which the two ordinarie maine battailes haue, I would place the lodgyng of euerie two battailes, beinde the lodgynges of the horsemen, euerie one of whiche, should haue in length . xi . yardes and a quarter, and in bredeth . xxii . yardes and a half, as those of the horsemen, and shoulde bee soigned on the hinder parte, that thei shoulde touche the one the other. And in euerie first lodgyng on euerie side which cometh to lie on the crosse wale, I would lodge the Countable of a battaile, whiche shoulde come to stand euen with the lodgyng of the Capitayne of the men of armes, and this lodgyng shall haue onely of space for bredeth . xv . yardes, and for length . xij . yardes and a halfe. In the other . xv . lodgynges, that on euerie side followeth after these, euen vnto the ouerthwarte way, I would lodge on euerie part a battaile of foote men, whiche beyng . liij . hundred and fiftie, there will come to a lodgyng . xxx . the other . xv . lodgynges, I would place continually on euerie side on those of the light horse men, with the verie same spaces, where I would lodge on euerie part, an other battaile of foote men, and in the laste lodgyng, I would place on euerie parte the Countable of the battaile, whiche will
come

The lodgings
for the footmen
of two ordi-
nary maine bat-
tailes.

The lodgings
for the counta-
bles.

The number
of footmen
appointed to e-
uerie lodging.

come to Iolgne with the same of the Capitaine of the
lighte horsemen, with the space of .viij. paces and a
halfe for length, and .xv. for bredeth: and so these two
firste orders of lodgynges, shal be halfe of horsemen,
and halfe of footemen. And for that I woulde (as in
the place therof I haue tolde you) these horsemenne
shoulde be all profitable, and for this haupnge no ser-
uauntes whiche in keepyng the horses, or in other ne-
cessarie thynges might helpe the, I woulde that these
footemen, who lodge behynde the horse, should bee
bounde to helpe to provide, and to keepe them for
their maisters: and for this to bee exempted from the
other doynges of the Campe. The whiche maner,
was obserued of the Romaines. Then leauyng after
these lodgynges on euery parte, a space of .xxij. pa-
ces and a halfe, whiche shoulde make a waye, that
shoulde be called the one, the firste waye on the righte
hande, and the other the firste waie on the lefte hand,
I woulde pitche on euery side an other order of .xxij.
double lodgynges, whiche shoulde tourne their hinder
partes the one agaynst the other with the verie same
spaces, as those that I haue tolde you of, and deuided
after the sixtent in the verie same maner for to make
the ouerthwarte waie, where I would lodge on euery
side .iiij. battailes of footemen, with their constables
in bothe endes. Then leauyng on euery side an other
space of .xxij. paces and a halfe, that shoulde make a
waie, whiche shoulde be called of the one side, the se-
conde waie on the right hande, and on the other syde,
the seconde way on the lefte hande, I would place an
other order on euery side of .xxij. double lodgynges,
with the verie same distance and deuisions, where I
would lodge on euery side, other .iiij. battailes with
their Constables: and thus the horsemenne and the
bandes of the twoo ordinarie maine battailes, shoulde
come to be lodged in thre orders of lodgynges, on the
one side of the capitaine waie, and in thre other or-
ders

The sixte booke.

bers of lodgynges on the other side of the Capitaine waie. The twoo aidyng maine battels (soz that I cause them to be made of the verie same nation) I woulde lodge them on euerie parte of these twoo ordinarie maine battailes, with the very same orders of double lodgynges, pitchyng first one order of lodgynges, where should lodge halfe the horsemen, and half the foote men, distance. xxiij. yardes and a halfe from the other, soz to make a way whiche should be called the one, the thirde waie on the right bande, and the other the thirde waie on the leste bande. And after, I woulde make on euerie side, twoo other orders of lodgynges, in the verie same maner distinguished and ordeined, as those were of the ordinarie maine battelles, which shall make twoo other wayes, and they all should be called of the numbze, & of the bande, where they should be placed: in suche wyse, that all this side of the armie, shoulde come to be lodged in. xliij. orders of double lodgynges, and in. xliij. waies, rekenyng capitaine waie, and crosse waie: I woulde there should remayne a space from the lodgynges to the Trenches of. lxxvj. yardes rounde aboute: and if you reckon al these spaces, you shall see that from the middest of the Capitaines lodgyng to the east gate, there is. D. x. yardes: Now there remaineth twoo spaces, whereof one is from the Capitaines lodgyng to the South gate, the other is from thence to the North gate: whiche come to be (either of them measurynge them from the poynce in the middest). CCC. lxxviij. yardes. Then takyng out of euerie one of these spaces xxxviij. yardes and a halfe, whiche the Capitaynes lodgyng occupieth, and. xxxviij. yardes euert waie soz a market place, and. xxxviij. yardes and a halfe soz a way that deuides euerie one of the saied spaces in the middest, and. lxxvj. yardes, that is leste on euerie part betweene the lodgynges and the Trenches, there remaineth on euerie side a space soz lodgynges of. CCC. yardes

gardes bꝛoade, and. lxxv. yꝛdes longe, measurynge the length with the space that the Capitaines lodgyng taketh vp. Deuidynge then in the myddest the saide lengthe, there woulde be made on euery hande of the Capitaine. xl. lodgynges. xxxv. yꝛdes and a halfe longe, and. xv. bꝛoade, whiche will come to be in all lxxx. lodgynges, wherin shall be lodged the beddes of the maine battailes, the Treasurers, the Marshalles of the fielde, and all those that shoulde haue office in the armie, leauynge some boide so; straungers that shoulde happen to come, and so; those that shall serue so; good will of the Capitaine. On the parte behinde the Capitaines lodgyng, I woulde haue a way from South to North. xliij. yꝛdes large, and shoulde be called the hed way, whiche shall come to be placed a longe by the. lxxx. lodgynges asoforsayd: so; that this wale, & the crosseway, shall come to place in the myddest betweene them bothe the Capitaines lodgyng, and the. lxxx. lodgynges that be on the sides therof. From this hed wale, and from ouer agaynst the capitaines lodgyng, I woulde make an other wale, which shoulde goe from thens to the weste gate, lyke wyse bꝛoade. xxiij. yꝛdes and a halfe, and shoulde aunswer in situation and in length to the Capitaine way, and shoulde be called the market wale. These twoo wales beyng made, I woulde ordeine the market place, where the market shall bee kepte, whiche I woulde place on the head of the market way ouer agaynst the capitaines lodgyng, & ioyned to the head way, and I woulde haue it to be quadꝛante, and woulde assigne lxxx. yꝛdes and thre quarters to a square: and on the right hande and lefte hande, of the saide market place, I woulde make two orders of lodgynges, where euery order shal haue eight double lodgynges, which shall take vp in length. li. yꝛdes, and in bꝛedeth. xxiij. yꝛdes and a halfe, so that there shall come to be on euery hande of the market place, xxiij. lodgynges that

lodginges for the
chiefe Capitaines
of the maine battayles
and for the
treasurers, marshals
and strangers.

The lodgynges for the
chiefe Capitaines
of the maine battayles
and for the
treasurers, marshals
and strangers.

Lodginges for
the horsemen,
of the extraor-
dinarie mayne
battailes.

The lodging-
ges for the ex-
traordinarie
Pykes and
Weliti.
And also the
order of the
same.

shall place the same in the midst which shall be in al-
lerij. wherein I woulde lodge those horsemen, which
shoulde remaine to the alypnyng mayne battailes: and
when these shoulde not suffice, I woulde assigne theini
some of those lodginges that placeth between them &
Capitaines lodgynge, & in especially those, that lie
towards the Trench. Thers resteth now to lodge
the Wykes, and extraordinarie Weliti, that euerie main
battaile hath, which you know accorpyng to our or-
der, how euerie one hath besides the .r. battailes. M.
extraordinarie Wykes, and siue hundred Weliti: so
that the two cheefe maine battailes, haue two thou-
sande extraordinarie Wykes, and a thousande extra-
ordinarie Weliti, and the apders as many as those, so
that yet there remaineth to be lodged, vj. M. menne,
whome I woulde lodge all on the weste side, and a
longe the Trench. When from the ende of the bed
waye, towards the pothe, leauyng the space of. lxxv.
yardes from them to the trench, I woulde place an
order of .v. double lodgynges, whiche in all shoulde
take vp. lviij. yardes in lengthe, and. xxx. in bredeth: so
that the bredeth deuided, there will come to euerie
lodgynge. xi. yardes and a quarter for lengthe, & for
bredeth two and twentie yardes and a half. And be-
cause there shall be. r. lodgynges, I will lodge three
hundred men, apoinyng to euerie lodgynge. xxx. men:
leauyng then a space of three and twentie yardes and
a quarter, I woulde place in like wise, and with like
spaces an other order of siue double lodgynges, and a-
gaine an other, till there were siue orders of siue dou-
ble lodgynges: which will come to be fiftie lodgynges
placed by right line on the pothe side, euerie one of
them distant from the Trench. lxxv. yardes, which
will lodge fiftene hundred men. Tournyng after on
the lefte hande towards the weste gate, I woulde
pyshe in all the same tracte, whiche were from them
to the saied gate, siue other orders of double lodgyn-
ges,

ges, with the verie same spaces, and with the verie same maner: true it is, that from the one order to the other, there shall not be moze then a. xj. yardes and a quarter of space: wherin shall be lodged also fifteene hundred men: and thus from the North gate to the weste, as the Trencher turneth, in a hundred lodgings deuided in . x. rowes of five double lodgings in a rowe, there will be lodged all the pikes and extraoꝛdinarie Milti of the cheefe maine battayles. And so from the west gate to the South, as the Trencher tourneth euen in the verie same maner, in other ten rowes of ten lodgings in a rowe, there shall be lodged the pikes, and extraoꝛdinarie Milti of the aduynge mayne battayles. Their headdes or their countables may take those lodgings, that shall seeme vnto them moſte commodious, on the parte towarde the trencher. The Artillerie, I woulde dispose throughtoute all the Campe, a longe the banke of the Trencher and in all the other space that shoulde remaine towarde the weste, I woulde lodge all the vnarmed, and place all the impedimentes of the Campe. And it is to be vnderſtoode, that vnder this name of impedimentes (as you know) the antiquitee mente all the same trayne, and all those thynges, which are necessarie for an armie, besides the ſouldiours: as are Carpenters, Smithes, Masons, Ingeners, Bombardiers, althoughe that those might be counted in the numbꝛe of the armed, herdemmen with their herdes of muttons & beeres whiche for victualliny of the armie, are requiſſet: and mozeouer maisters of all sciences, together with publicke carrriages of the publicke munition, whiche pertaine as well to victualliny, as to armyng. For I would not distinguish theſe lodgings particularly, only I would marke out the waies which shoulde not be occupied of them: then the other spaces, that be twene the waies shall remaine, whiche shall be ſower, I woulde appointe them generally for all the

How the Artillerie must be placed in the Campe.

Lodgings for the vnarmed men, and the places that are appointed for the impedimentes of the campe.

E. g.

ſaid

The sixte booke.

saied impedimentes, that is one for the herdenmen, the other for artificers and crafter me, the thirde for publicke carriages of victuals, the fowerth for the munition of armor and weapons. The waies whiche I woulde shoulde be leste without ocupying them, shal be the market waie, the head waie, and moze ouer a waie that shoulde be called the midde waie, whiche should goe from North to South, and should passe throughte the middest of the market waie, whiche from the weste parte, shoulde serue for the same purpose that the ouerthwarte way doeth on the east parte. And besides this, a waie whiche shall goe aboute on the hinder parte, alonge the lodgynges of the pikes and extraordinary Heliti, and all these wayes shall be twoo and tweentie yardes and a halfe broade. And the Artillerie, I woulde place a longe the Trench of the Campe, rounde aboute the same.

Sabysse. I confesse that I vnderstand not, nor I beleue that also to saie so, is any shame vnto me, this beyng not my exercise: not withstanding, this order pleaseeth me muche: onely I woulde that you shoulde declare me these doubtles: The one, whie you make the waie, and the spaces aboute so large. The other, that troubleth me moze, is these spaces, whiche you apoincte oute for the lodgynges, howe they ought to be vsed.

Fabrisio. You must note, that I make all the waies, xxij. yardes and a halfe broade, to the intente that thou tolde them, maie go a battaile of men in a rate, where if you remember wel, I tolde you howe euery bande of menne, taketh in breadth betwene. xliij. and. xxij. yardes of space to marche or stande in. Nowe where the space that is betwene the trench, and the lodgynges, is. lxxv. yardes broade, the same is moke necessarie, to the intent thei maie there order the battailes, and the artillerie, bothe to condaucte by the same the pzaies, and to haue space to retire theim selues with newe trenches,

ches, and newe fortification if neede were: The lodg-
inges also, stande better so farre from the ditches, be-
yng the moze out of daunger of fires, and other thyn-
ges, whiche the enemye, might throwe to hurte them.
Concernyng the seconde demaunde, my intent is not
that euery space, of me marked out, bee couered with
a pavillion onely, but to be vsed, as tourneth commo-
dious to such as lodge there, either with moze or with
lesse Tentes, so that thei go not out of the boundes of
thesame. And so; to marke out these longinges, there
ought to bee mosse cunnyng menne, and mosse excel-
lente Architectours, whom, so sone as the Capitaine
hath chosen the place, maie knowe how to giue it the
facion, and to distribute it, distinguishyng the waies,
deuidyng the lodgynges with Coardes and stauces, in
soche practised wise, that straight waie, thei maie bee
ordained, and deuided: and to minde that there growe
no confusion, it is conueniente to tourne the Campe,
alwaies one waie, to the intende that euery manne
maie knowe in what waie, in what space he hath to
finde his lodgyng: and this ought to be obserued in e-
uery tyme, in euery place, and after soche maner, that
it seme a mouyng Citee, the whiche where so euer it
goeth, carrieth with it the verie same waies, the ve-
rie same habitacions, and the verie same aspectes, that
it had at the firste: The whiche thing thei cannot ob-
serue, whom sekynge strong situations, must chaunge
soyme, accoording to the variation of the ground: but
the Romaines in the plaine, made stronge the place
where thei incamped with trenches, and with Ram-
pires, because thei made a space about the campe, and
besoie thesame a ditch, ordinary broad sower yardes
and a halfe, and depe aboute twoo yardes and a quar-
ter, the which spaces, thei increased, accoording as thei
intended to tarie in a place, and accoording as thei fea-
red the enemye. I for my parte at this presente, would
not make the listes, if I intende not to winter in a

*The Campe
ought to be all
waies of one
facion.*

The sixte booke

place: yet I would make the Trench and the bancke no lesse, then the foresaid, but greater, accoꝝdyng to necessitie. Also, considering the artillerie, I would intrench vpon euery coꝝner of the Campe, a halfe circle of ground, from whens the artillerie might flanke, whom so euer should seke to come ouer the Trench. In this practise in knowyng how to ordaine a campe, the souldiours ought also to be exercised, & to make wth them the officers expert, that are appointed to marke it out, and the souldiours readie to knowe their places: noꝝ nothing therein is difficulte, as in the place thereof shall bee declared: wherefoꝝe, I will goe foꝝe warde at this tyme to the warde of the campe, because without distribution of the watche, all the other pain that hath been taken, should be vaine.

Baptiste. Befoꝝe you passe to the watche, I desire that you would declare vnto me, when one would pitche his campe nere the enemye, what waie is vsed: foꝝ that I knowe not, how a man maye haue tyme, to be able to ordaine it without perill.

Fabricio. You shall vnderstande this, that no Capitaine will lye nere the enemye, except he, y^e is despoled to saight the fielde, when so euer his aduersarie will: and when a capitaine is so disposed, there is no perill, but ordinarie: foꝝ that the twoo partes of the armie, stande alwaies in a redinesse, to saight the battaile, & the other maketh y^e lodgings. The Romaines in this case, gaue this order of fortifying the Campe, vnto the Triary: & the Principi, & the Alati, stood in armes. This they did, foꝝ as moche as the Triary, beyng the last to saight, might haue time inough, if the enemye came, to leaue the woꝝke, & to take their weapons, & to get them into their places. Therfoꝝe, accoꝝdyng vnto the Romaines maner, you ought to cause the Campe to be made of those battailes, whiche you will set in the hinder parte of the armie, in the place of the Triary. But let vs tourne to reason of the watche.

The sixte booke. Fol.lxxxiiij.

I thinke I haue not sounde, emongest the antiquitie, that for to warde the campe in the night, thei haue kepte watche without the Trench, distaunte as thei vse now a daies, whom thei call Scoutes: the whiche I beleue thei did, thinking that y^e armie might easely bee deceiued, thzough the difficultie, that is in seeyng them againe, for that thei might bee either corrupted, or oppressed of the enemye: So that to truste either in parte, or altogether on them, thei iudged it perillous. And therefore, all the strength of the watche, was with in the trench, whiche thei did withall diligence kepe, and with moſte greate order, punished with death, whom so euer obserued not thesame order: the whiche how it was of them ordained, I will tell you no other wise, leaſte I should bee tedious vnto you, beyng able by your self to see it, if as yet you haue not seen it: I shall onely briefly tell that, whiche shall make for my purpose. I would cause to stand ordinarly every night, the thirde parte of the armie armed, and of thesame, the solwerth parte alwaies on foote, whom I would make to bee distributed, thzoughout all the banckes, and thzoughout all the places of the armie, with double warde, placed in every quadrante of thesame: Of whiche, parte should stande still, parte continually should go from the one corner of the Campe, to the other: and this order, I would obserue also in the daie, when I should haue the enemye nere.

Concernyng the giuyng of the watche worde, and renuyng thesame every euening, and to doe the other thynges, whiche in like watches is vsed, bicause thei are thynges well inough knowne, I will speake no further of them: onely I shall remeber one thyng, for that it is of greate importaunce, and whiche causeth great saulſgarde obseruyng it, and not obseruyng it, moche harme: The whiche is, that there be obserued greate diligence, to knowe at night, who lodgeth not in the Campe, and who cometh a newe: and this is

The antiquitie
vse of no
Scoutes.

The watche
and warde of
the Campe.

Diligence
ought to be
vsed, to knowe
who lieth oute
of the Campe,

an

The sixte booke.

and who they
be that cometh
of newe.

Claudius
Nero.

The iustice
that ought to
be in a campe.

The faults that
the antiquitie
punished with
death.

an easie thing to see who lodgeth, with the same order that loe haue appointed: for as moche as every lodgynge haue the determined number of menne, it is an easie matter to see, if thei lacke, or if there be moze menne: and when thei come to be absente without licence, to punish the as fugitiues, and if there be moze, to vnderstande what thei be, what they make there, & of their other condicions. This diligence maketh that the enemy cannot but with difficultie, practise wth thy capitaines, and haue knowlege of thy counsailes: which thing if of the Romaines, had not been diligently obserued, Claudius Nero could not, haue Aniball nere hym, departed from his Campe, whiche he had in Lucania, and to go and to retourne from Parca, without Aniball should haue firste heard thereof some thyng. But it suffiseth not to make these orders good, excepte thei bee caused to be obserued, with a greate seueritie: for that there is nothyng that would haue moze obseruacion, then is requisite in an armie: therefore the lawes for the maintenaunce of the same, ought to be sharpe and harde, and the execution thereof mozte harde. The Romaines punished with death hym that lacked in the watch, he that sojoke the place that was giuen hym to saight in, he that caried any thyng, hidde out of the Campe, if any manne should saie, that he had doen some woorthy thing in the saight, and had not doen it, if any had fought without the commaundement of the Capitaine, if any had for feare, caste a waie his weapons: and when it happened, that a Cohorte, or a whole Legion, had committed like fault, because thei would not put to death all, thei yet tooke all their names, and did put them in a bagge, and then by lotte, thei drew oute the tenth parte, and so those were put to death: the whiche punishment, was in soche wise made, that though every man did not feele it, every man notwithstanding feared it: and because where be greate punishments, there ought to be also

so rewardes, myndyng to haue menne at one instant, to feare and to hope, thei had appointed rewardes to euery worthy acte: as he that saigthing, saued the life of one of his Citezeins, to hym that firste leapt upon the walle of the enemies Toun, to hym that entered firste into the Campe of the enemies, to hym that had in saigthing hurte, or slaine the enemye, he that had stroken hym from his horse: and so euery vertuous act, was of the Consulles known and rewarded, and openly of euery manne praised: and soche as obtained giftes, for any of these thynges, besides the glozie and fame, whiche thei got amongest the souldiours, after when thei returned into their countie, with sollemne pompe, and with greates demonstration among their frendes and kinfolkes, thei shewed them. Therefore it was no maruelle, though the same people gotte so muche dominion, hauing so moche obseruation in punishmente, and rewardes towarde theim, whom either for their well doynge, or for their ill doynge, should deserue either praise or blame: Of whiche thynges it were conuenient, to obserue the greater parte. For I thinke not good to kepe secrete, one maner of punishmente of theim obserued, whiche was, that so sone as the offendour, was before the Tribune, or Consulle consulted, he was of the same lightly stroken with a rodde: after the whiche stryking, it was lawfull for the offendour to die, and to all the souldiours to kill hym: so that straight wase, euery man thowhe at hym either stones, or dartes, or with other weapons, stroke hym in soche wise, that he went but little wase a liue, and moche selue escaped, and to those that so escaped, it was not lawfull for the to retourne home, but with so many incommadities, and soche greates shame and ignomie, that it should haue ben moche better for him to haue died. This maner is seen to be almoste obserued of the Sutzers, who make the condemned to be put to death openly, of thother souldiours, the whiche

Where greates punishmente be, thei oughte liue: so be great rewardes

It was no maruel that the Romaynes became mightie by this way.

And thus the

The sixte booke.

I meane to pun-
nise and exco-
cute Justice, wth
without raising
any tumultes.

Manlius Ca-
pitolineus.

Manlius Cap-
itolineus was
a great man
in Rome.

Souldiours
sworn to kepe
the discipline
of warre.

Women and
idell games,
were not suffer-
ed by the anti-
quities, to bee in
their armies.

is well considered, and excellently dooen: for that in-
tendynge, that one be not a defendour of an euill doer,
the greatestte reamedie that is founde, is to make hym
punisher of thesame: because otherwise, with other
respeate he fauoureth hym: where when he hymself is
made executioner, with other desire, he desireth his
punishment, then when the execution cometh to
an other. Therefore myndynge, not to haue one fauor-
ed in his faulte of the people, a greates remedie it is,
to make that the people, maie haue hym to iudge, For
the greater pzoofe of this, this sample of Manlius Ca-
pitolineus might be brought, who being accused of the
Senate, was defended of the people, so longe as the
were not Judge, but becomynge arbitratours in his
cause, thei condemned hym to death. This is then a
waie to punishe, without raising tumultes, and to
make iustise to be kepte: and for as moche as to byld
atmed menne, neither the feare of the Lawes, nor of
menne suffice not, the antiquitie tolled thereunto the
auctoritie of God: and therefore with moste greates
Ceremonies, thei made their souldiours to sweare, to
kepe the discipline of warre, so that doyng contrarie-
wise, thei should not onely haue to feare the Lawes,
and menne, but God: and thei vled all diligence, to fill
them with Religion, Baptisme. Did the Romaines permitte, that women
might bee in their armies, or that there might be vled
these idell playes, whiche thei vse now a daies?
Fabrice. Thei prohibited the one and the other, and
this prohibition was not moche difficulte: For that
there were so many exercises, in the whiche thei kept
etier daye the souldiours, some whiled particularely,
some whiles generally occupied, that thei had no time
to thinke, either on women, or on playes, nor on any o-
ther thyng, whiche seditious and vnprofitable soul-
dours doe.
Baptisme. I am herein satisfied, but tell me, to be the
armie

arme had to remoue, what order kepte thei?

Fabricio. The chief Trumpet sounded thre tymes, at the firste sound, thei toke vp the Lenten, and made the parkes; at the seconde, thei laded the carriage, at the thirde, thei remoued in the same maner asofore, with the impedimentes after euery parte of armed men, placing the Legions in the middeste: and therefore you ought to cause after the same sorte, an extraordinary maine battaile to remoue: and after that, the particulare impedimentes therof, and with those, the sowerth part of the publike impedimentes, which should bee all those, that were lodged in one of those partes, whiche a little agoe we declared: and therefore it is conueniente, to haue euery one of them, appointed to a maine battaile, to the entente that the arme remouyng, euery one might knowe his place in marching: and thus euery maine battaile ought to goe a waie, with their owne impedimentes, and with the sowerth parte of the publike impedimentes, following after in soche maner, as wee shewed that the Romaines marched.

Sextus. In pitching the Campe, had thei other respects, then those you haue tolde?

Fabricio. I tell you again, that the Romaines when thei encamped, would be able to kepe the accustomed fashion of their maner, the whiche to obserue, thei had no other respects: but concernyng for other considerations, thei had two principall, the one, to incampe thein selues in a wholesome place, the other, to place thein selues, where the enemye coulde not besiege thein, nor take from thein the waie to the water, or victualles. When for to auoid infirmitie, thei did the from places stremis, or subiecte to hurtfull winde: whiche thei knewe not so well, by the qualitie of the situacio, as by the face of the inhabitants: for when thei sawe thein euill coloured, or swollen, or full of other infection, thei would not lodge there: concernyng the other

Order in the remouing the arme by the sounden of a Trumpet.

Respects to be had for the campanyng.

How to choose a place to incampe.

The sixte booke.

respecte to pꝛouide not to be besieged, it is requisite to
 consider the nature of the place, where the friendes
 lye, and where the enemies, and of this to make a con-
 secure, if thou maiest be besieged or no: and therefore
 it is meete, that the Capitaine be moste experte, in the
 knowlege of situations of countries, and haue aboute
 him diuers men, that haue the verie same expertenes.
 Thei auoide also diseases, and famishment, with cau-
 syng the armie to kepe no misrule, soꝛ that to purpose
 to maintain it in health, it is needefull to pꝛouide, that
 the souldiours make slepe vnder tentes, that thei make
 lodge where bee Trees, that make shadowe, where
 woodde is soꝛ to dresse their meate, that thei go not in
 the heate, and therefore thei muste bee drawn out of
 the campe, befoꝛe daie in Summer, and in Winter, to
 take hede, that thei marche not in the Snows, and in
 the Froste, without hauyng comoditie to make fire,
 and not to lack necessarie aparel, noꝛ to drinke naugh-
 tie water: those that fall sicke by chance, make them
 to bee cured of diseases: bicause a capitaine hath no
 reamedie, when he hath to faight with sicknesse, and
 with an enemy: but nothing is so profitable, to main-
 taine the armie in health, as is the exercise: and ther-
 foꝛe the antiquitie every daie, made them to exercise:
 wherby is seen how muche exercise availleth: soꝛ that
 in the Cape, it kepeth thee in health, and in the faight
 victorious. Concernyng famishment, it is necessa-
 rie to see, that the enemy hinder thee not of thy victu-
 alles, but to pꝛouide where thou maiest haue it, and
 to see that the same whiche thou hast, bee not loste:
 and therefore it is requisite, that thou haue alwaies
 in pꝛouision with the armie, sufficient victuall foꝛ a
 moneth, and then remouyng into some strong place,
 thou muste take oꝛder with thy next frendes, that
 daily thei make pꝛouide foꝛ thee, and aboute althinges
 helpe the victuall with diligence, giuyng every daie
 to every manne, a reasonable measure, and obserue
 after

How to auoide
 diseases from
 the armie,

The wonder:
 full commodi-
 tie of exercise.

The pꝛouision
 of victualles
 that ought al-
 waies to bee in
 a readinesse in
 an armie.

The use of victu-
 alls in an armie.

after soche sorte this poyncte, that it disorder thee not because all other thyng in the warre, maie with tyme be overcome, this onely with tyme overcometh thee: no; there shall neuer any enemye of thyne, who maie overcome thee with famishment, that will seeke to overcome thee with yron. For that though the victorie be not so honourable, yet it is more sure and more certaine: Then, the same armie cannot avoid famishment, that is not an obseruer of iustice, whiche licenciously consumeth what it listeth: because the one disorder, maketh that the victualls cometh not vnto you, the other, that soche victuall as cometh, is vnprofitably consumed: therefore thantiquitie ordained, that they should spende the same, whiche they gaue, and in the same tyme when they appointed: so that no souldiour did eate, but when the Capitaine did eate: The whiche how moche it is obserued of the armies nowe adales, every manne knoweth, and worthely they cannot bee called menne of good order and sober, as the antiquitie, but lasciuious and drunkardes.

Baptiste. You saied in the beginning of ordering the Campe, that you would not stande onely vpon two maine battailes, but would take sower, so that we shoulde haue a iuste armie incamped: therefore I would you shoulde tell me twoo thynges, the one, when I shoulde haue more or lesse men, howe I ought to incampe them, the other, what numbze of souldiours shoulde suffice you to fight against what so ever enemye that were.

Fabritio. To the first question I answer you, that if the armie be more or lesse, then sower or fire thousande souldiours, the orders of lodgings, may be taken a waile or ioined, so many as sufficeth: and with this way a man may goe in more, and in lesse, into infinite: Notwithstanding the Romaines, when they ioined together twoo consull armies, they made twoo campes, and they tourned the partes of the vn-

armed

Howe to lodge
in the Campe
more or lesse
menne, then the
ordinarie.

The sixte booke

armed, thone against thother. Concernyng the second question, I say vnto you, that the Romaines ordinary armie, was about. xxliij. M. souldiers: but when they were dyuen to faght against the greatest polwer that might be, the mosse that they put together, wer. l. M. With this number, they did set against two hundred thousand Frenchemen, whome assaulted them after the first warre, that they had with the Carthaginers. With this verisame numbze, they fought against Anniball. And you muste note, that the Romaines, and the Grekes, haue made warre with selve, sozefying themselves thozough order, and thozough arte: the west, and the east, haue made it with multitude: But the one of these nacions, doeth serue with naturall furie, as doe the men of the west partes, the other thzough the great obedience whiche those men haue to their kyng. But in Grece, & in Italy, beyng no naturall furie, noz the naturall reuerence towarde their kyng, it hath been necessary for them to learne the discipline of warre, the whiche is of so muche force, that it hath made that a selve, hath been able to overcome the furie, and the naturall obstinatenesse of manie. Wherefore I saie, that myndyng to imitate the Romaines, & the Grekes, the number of. l. M. souldiers, ought not to bee passed, but rather to take lesse: because manie make confusion, noz suffer not the discipline to be obserued, and the orders learned, and Pirrus vsed to saie, that with. xij. thousande men he woulde assaile the worlde: but let vs pas to an other parte. We haue made this our armie to winne a field and shewed the trauailes, that in the same fight may happen: we haue made it to marche, & declared of what impedimentes in marchyng it may be disturbed: and finally we haue lodged it: where not only it ought to take a littell reste of the labours passed, but also to thinke howe the warre ought to be ended: for that in the lodgynges, is handled many thynges, inspect-

ally

The nombre of men that an army ought to be made of, to be able to faghte with the puissantest enemye that is.

Pirrus,

ally thy enemies as yet remainyng in the felde, and in suspected towne, of whome it is good to be assured, and those that be enemies to overcome them: therfore it is necessarie to come to this demonstration, & to passe this difficultie with the same glozie, as hither to we haue warred. Therfore comynge to particular matters, I saie that if it shoulde happen, that thou wouldest haue manie men, or many people to doe a thyng, whiche were to thee profittable, and to theim greate hurte, as shoulde be to breake downe the wall of their citie, or to sende into exile many of them, it is necessarie for thee, either to beguile them in such wise that euerie one beleene not that it toucheth him: so that succouryng not the one the other, thei may finde them selues al to be oppressed without remedie, or els vnto all to commaunde the same, whiche they ought to doe in one selfe daie, to the intente that euery mā beleuyng to be alone, to whome the commaundement is made, make thinke to obey and not to remedie it: so withoute tumulte thy commaundement to be of euerie man executed. If thou shouldest suspecte the fidelitie of anie people, and wouldest assure thee, and overcome them at vnawares, so to colour thy intents more easilie, thou canst not doe better, then to counsel with them of some purpose of thine, desirynge their aide, and to seeme to intende to make an other enterprise, and to haue thy minde farre from thinkyng on them: the whiche wilt make, that thei shall not thinke on their owne defence, beleuyng not that thou purposest to hurte them, and thei shal geue thee commoditie, to be able easely to satisfie thy desire. When thou shouldest perceiue, that there were in thine armye some, that vsed to aduertise thy enemye of thy devices, thou canst not doe better, myndynge to take commoditie by their traiterous mindes, then to commen with them of those thynges, that thou wilt not doe, and those that thou wilt doe, to kepe secret, and to say

Howe to cause men to do soke a thing as shoulde be profitable for thee, & hurtfull to them selues.

Howe to come to come men as vnawares.

How to turne to commoditie the doynges of soke, as vse to aduertise thy enemye of thy proceedings.

The sixte booke.

to doubt of thynges, that thou doubttest not, & those of whiche thou doubttest, to hide: the which shall make the enemy to take some enterprise in hand, beleuing to know thy deuises, where by easily thou maist beguile & oppresse hym. If thou shouldest intende (as Claudius Nero did) to diminish the thy armie, sendynge helpe to some frende, and that the enemy shoulde not be aware therof, it is necessarie not to diminish the lodgynges, but to maintayne the signes, and the orders whole, makynge the verie same fires, & the verie same wardes throughout all the camps, as wer wont to be also. Alike wise if with thy armie there should ioigne new men, and wouldest that the enemy shoulde not know that thou werest ingrosed, it is necessarie not to increase the lodgynges: Because keepynge secretes doynge and deuises, hath alwaies been mooste profitable. Wherfore Metellus beyng with an armie in Hispanie, to one, who asked him what he would doe the next daie, answered, that if his werte knew therof, he would bourn it. Marcus Crausus, vnto one, whome asked him, when the armie shoulde remoue, said beleueing thou to be alone not to here the trumpet. If thou shouldest desire to vnderstande the secretes of thy enemy, and to know his orders, some haue vsed to sende embassadors, and with them in seruantes apparel, mooste expertest men in warre: whom hauntyng taken occasion to se the enemies armie, and to consider his strengthe and weakenesse, it hath geuen them oportunitie to overcome him. Some haue sente into exile one of their familiars, and by meanes of the same, hath knowen the deuises of his aduersarie. Also like secrettes are vnderstoode of the enemies when for this effecte there were taken any prisoners. Marius whiche in the warre that he made with the Cimbric, for to know the safeth of those Frenchmen, who then inhabited Lombardie, and were in leage with the Romaine people, sent them letters open, & sealed

How to order
the campe, that
the enemy shal
not perceiue
whether the
same bee dimin-
ished, or in-
creased.

A sayng of
Metellus.

Marius
Crausus.

How to vnder-
stand the secre-
tes of thy ene-
my.

A policie of
Marius, to vnder-
stande howe
he might trauell
the Frenchmen.

sealed: and in the open he wrote, that they shoulde not open the sealed, but at a certaine time, and befoze the same time demaundayng them againe, and finding them opened, knew thereby that their faith was not to be trusted. Some Capitaines, being inuaded, haue not desired to goe to meete the enemye, but haue gone to assaulte his countrey, and constrained him to retorne to defende his owne home: The whiche manie times hath come wel to passe, so; that those soldours beginnyng to fill them selues with booties, and confidence to overcome, shall sone make the enemies soldours to were afraide, when they supposynge them selues conquerours, shall vnderstand to become losers: So that to him that hath made this diuersion, manie times it hath proued well. But onely it may be doent by him, whiche hath his countrey stronger then that of the enemies, because when it were otherwise, he should goe to leese. It hath been often a profitable thyng to a capitaine, that hath been besieged in his lodgynges by the enemye, to moue an intreatie of a greemente, and to make truse with him so; certaine daies: the which is woute to make the enemies more negligente in all doynges: so that auaypynge thee of their negligence, thou maiest easely haue occacion to get thee oute of their handes. By this way Silla deliuered him selfe twise from the enemies: and with this verie same descrypte, Asdruball in Hispayne got oute of the foze of Claudious Nero, to whom he besieged him. It helpeth also to deliuer a man out of the danger of the enemye, to do some thyng beside the foze, that may keepe him at a baye: this is dooen in two maners, either to assaulte him with parte of thy power, so that he beyng attentue to the same sight, may geue commoditie to the reste of thy men to bee able to saue theim selues, or to cause to rise some newe accidente, which so; the strayngenesse of the thyng, maie make him to marnell, and so; this occasion to

What some Capitaines haue doent wth their countrey haue been inuaded of enemies,

To make the enemye negligente in his doynges,

Silla,

Asdruball,

The sixte booke.

The pollicie of
Aniball, where
by he escaped
out of the dan-
ger of Fabius
Maximus.

A Capitayne
must deuise
how to deuise
the foire of his
enemies.

How to cause
the enemy to
haue in suspect
his most trusty
men.

Aniball.

Cozolanus.

Metellus as
gainst Jugurte

A practis of
the Romayne
orators, to
byng Aniball
out of Credit
with Antio-
chus.

Howe to cause
the enemy to
deuide his po-
wer.

stande doubtfull, and still: as you knowe howe An-
niball dyd, who beyng inclosed of Fabius Marti-
mus, tied in the nighte small Bauens kindeled bee-
twene the hoznes of mane Dren, so that Fabius
astonied at the strangenesse of the same sight, thought
not to lette him at all the passage. A Capitayne
oughte amonge all other of his affaires, with al sub-
tillie to deuise to deuide the foire of the enemy, ei-
ther with making him to suspecte his owne menne,
in whome he trusteth, or to giue him occasion, that
he maye separte his menne, and therby to be come
moze weak. The fyrste way is dooen with keepng
saule the thynges of some of those whiche he hath
about him, as to saue in the warre their menne and
their possessions, renderynge theim their children,
or other their necessaries withoute ransome. You
know that Anniball haupng burned all the fieldes
about Rome, he made onely to bee reserved saule
those of Fabius Maximus. You know how Cozola-
nus comyng with an armie to Rome, preserved the
possessions of the nobilitie, and those of the commi-
naltie he bourned, and sacked. Metellus hauinge an
armie againste Jugurte, all the orators, whiche of
Jugurte were sente him, were required of him, that
they woulde geue him Jugurte prisoner, and after to
the verie same men wrytyng letters of the verie same
matter, wryought in suche wise, that in shorte tyme
Jugurte haupng in suspecte all his counsellours, in
diuerse maners put them to death. Anniball beyng
fled to Antiochus, the Romayne orators practised
with him so familiarly, that Antiochus beyng in sus-
pecte of him, trusted not anie moze after to his coun-
selles. Concernyng to deuide the enemies men, there
is no moze certainer waie, then to cause their coun-
trie to be assaulted, to the intente that being constrai-
ned to goe to defende the same, they maye forsake the
warre. This way Fabius vld haupng agaynst his
armie

armie the power of the Frenchemen, of the Tuscans, Umbzies and Hannites. Titus Didius hauyng a few men in respecte to those of the enemies, and loo- kyng for a legion from Rome, and the enemies pur- posing to goe to incounter it, to the intentente that they should not goe, caused to bee noised thzough all his armie, that he intended the nerte daie to saighte the field with the enemies: after he vsed means, that certaine of the prisoners, that he had taken afoze, had occasion to runne awaie. And he declarpyng the order that the Consull had taken to saighte the nerte daie, by reason wherof the enemies beyng afraide to demin- ishe their owne strength, went not to incounter the same legion, and by this way thei wer conducted safe. The which means serueth not to deuide the force of the enemies, but to augmente a mans owne. Some haue vsed to deuide the enemies force, by lettynge him to enter into their countrie, and in pzoze haue let him take manie towne, to the intentente that puttynge in the same garrisons, he might thereby deminische his power, and by this waie hauyng made him weake, haue assaulted and ouercomen him. Some other min- dyng to goe into one pzouince, haue made as though they woulde haue innaded an other, and vsed so much diligence, that sodenly entryng into the same, where it was not doubted that they woulde enter, they haue first wonne it, befoze the ennemie coulde haue time to succour it: so that thy ennemie beyng not sure, whe- ther thou purposest to tourne backe, to the place spasse of thee thzeatned, is constrained not to forsake the one place, to succour the other, and so many times he defendeth neither the one noz the other. It importeth besides the sayde thynges to a Capitaine, if there growe sedicion or discorde amonge the souldiours, to knowe with arte howe to extynguishe it: The beste waie is to chastise the headdes of the faultes, but it muste be doen in such wise, that thou maiest first haue

Howe Titus Didius raised his enemies that wer going to incounter a legion of men that were com- myng in his ayde.

Howe some haue caused the enemy to de- uide his force.

A pollice to winne the ene- mies countrie befoze he be a waie.

Howe to de- stroye sedicion and discorde,

The sixte booke.

oppressed them, befoze they be able to be aware : The
 way is, if they be distaunte from ther, not onely to call
 the offenders, but together with them all the other,
 to the entente that not beleeynge, that it is for any
 cause to punish them, they become not contumelious,
 but geue commoditie to the execution of the punish-
 ments: when they be present, y^e oughtest to make thy
 selfe stronge with those that be not in faulte, and by
 meane of their helpe to punish the other. When
 there hapneth discorde amonge them, the beste waye
 is, to bying them to the perill, the feare whereof is
 wonte alwaies to make them agree. But that, which
 aboue all other thyng kepeth the armie in vnitee, is
 the reputation of the Capitaine, the whiche onely
 groweth of his vertue: because neither blood, nor au-
 thortie gaue it euer without vertue. And the chiefe
 thyng, whiche of a Capitaine is looked for to be doen,
 is, to keepe his souldiours punished, and payed: for
 that when so euer the paye lacketh, it is conueniente
 that the punishment lacke: because thou canst not
 correcte a souldiour, that robbeth, if thou dost not
 paye him, nor the same myndynge to liue, cannot ab-
 staine from robbynge: but if thou payest him, and
 punishest him not, he becometh in euerie condi-
 tion insolente: For that thou becomest of small
 estimation, where thou chauncest not to bee able to
 maintaine the dignitie of thy degree, and not maine-
 tainyng it, there foloweth of necessitee tumulte, & dis-
 corde, whiche is the ruine of an armie. Olde Caps-
 taines had a troubell, of the which the presente be al-
 mosse free, whiche was to interprete to their purpose
 the sinister auguries: because if there fell a thunder-
 bolte in an armie, if the sunne were darkened or the
 moone, if there came an earthquake, if the Capitaine
 either in gettyng vp, or in lightynge of his horse fell,
 it was of y^e souldiours interpreted sinisterously: And
 it ingendred in them so moche feare, that comynge to
 saighe

The benefite
 that the repu-
 tation of the
 Capitaine cau-
 seth, which is
 only gotten by
 vertue.

The chiefe
 thyng that a ca-
 pitayne ought
 to doe.

When paye
 wanteth, pun-
 ishment is
 not to be execu-
 ted.

The inconue-
 nience of not
 punishynge.

saight the fælde, easely they should haue lost it: and therefore the aunciente Capitaines so sone as a lyke accidents grewe, either they shewed the cause of the same, and redused it to a naturall cause, or they interpreted it to their purpose. Cesar falling in Africa, in comyng of the sea saied, Africa I haue taken thee. Mosesuer manie haue declared the cause of the obscuryng of the Moone, and of earthquakes: which thing in our time cannot happen, as well because our men be not so superstitious, as also for that our religion taketh away altogether such opinions: al be it when they should chaunce, y^e orders of y^e antiquitie ought to be imitated. When either famishment, or other naturall necessitie, or humaine passion, hath broughte thy enemye to an vtter desperation, and he is iuen of the same, cometh to saight with thee, thou oughtest to stande within thy campe, and as muche as lieth in thy power, to flic the saight. So the Lacedemonians did against the Masionians, so Cesar did against Afranio, and Petreio. Fuluius beyng Consul, against the Cimbrians, made his hoysen men manie daies continually to assaulte the enemies, and considered how they issued out of their campe for to follow them: wherefore he sette an ambushe behinde the Campe of the Cimbrians, and made them to be assaulted of his hoysen men, and the Cimbrians issuing oute of their campe for to follow them. Fuluis gotte it, and sacked it. It hath ben of great vtilitie to a Capitaine, hauyng his armie nere to the enemies armie, to sende his meane with the enemies ansignes to robbe, and to burne his owne countrey, whereby the enemies beleuyng those to bee menne, whiche are come in their aide, haue also runne to helpe to make them the pray: and for this disorderyng them selues, hath thereby given oportunitie to the aduersary to ouercome them. This waie Alexander of Epirus vsed againste the Illirians and Leptenus of Siracusa againste the Carthaginers

Cesar chaunc
lynge to fall,
made the same
to be supposed
to signify good
lucke.

Religion taketh
away fantasti-
call opinions.

In what cases
a Capitaine
ought not to
saight with
his enemye if
he may others
wyse chooise.

A policie of
Fuluius wher-
by he got and
spoyled
his enemies
Campe.

A policie to dis-
order the ene-
mie.

The sixte booke.

A policie to
ouercome the
enemie.

A policie.

How to be-
guile the ene-
mie.

Howe Demos-
trius trained
his enemies
out of stronge
places to bee
the better able
to ouercome the

and bothe to the one and to the other, the denisse came to passe most happely. Manie haue ouercome the enemie, geuyng him occasion to eate and to drinke oute of measure, sayning to haue feared, and leauing their Campes full of wyne & herdes of cattell, wherof the enemie beyng filled aboue all naturall vse, haue then assaulted him, and with his destruction ouerthrowen him. So Tamirus did against Cyrus, and Tiberius Gracchus agaynst the Spaniards. Some haue poisoned the wine, and other thynges to feede on, so to be able moze easely to ouercome them. I saied a littel afoze how I founde not, that the antiquitie kepte in the night Scouts abroade, and supposed that they did it so to auoide the hurte, whiche might growe therby: because it is founde, that throught no other meane then throught the watche man, whiche was set in the daie to watche the enemie, hath been cause of the ruin of him, that set him there: so that manie times it hath hapned, that he beyng taken, hath been made perforce to tell them the token, whereby they might call his felowes, who commyng to the token, haue been slaine or taken. It helpeth to beguile the enemie sometime to varie a custome of thine, wherevpon he hauing grounded him self, remaineth ruinated: as a Capitaine did once, whome vsinge to cause to be made signes to his men for comynge of the enemies in the night with fire, & in the daie with smoke, commaunded that withoute anye intermission, they shoulde make smoke and fire, and after comynge vpon them the enemie, they shoulde reste, whome beleuyng to come without beyng seen, perceiuyng no signe to be made of beyng discovered, caused (throught goeyng disordered) moze easie the victorie to his aduersarie. Demetrius a Rodian myndynge to drawe from stronge places the enemies armie, sente one vnder colour of a fugitiue, the whiche affirmed, howe his armie was in disorde, and that the greater parte
of

of them wente a waile: and so; to make the thyng to be credited, he caused to make in spozte, certaine tumultes amonge the lodgynges: wherby the enemye thynkyng thereby to be able to discomfaighte them, assaultyng theim, were ouerthowen.

Besides thesaied thynges, regarde ought to be had not to bypnye the enemye into extreme desperation: whereunto Cesar had regarde, saightyng with the Duchemen, who opened them the waile, seyng, howe thei beyng not able to fflye, necessitie made them stryg, and would rather take paine to followe them, when thei fled, then the perill to overcome them, when thei defended them selues.

Lucullus seyng, how certaine Macedonian horsemenne, whiche were with hym, went to the enemies parte, straight waile made to sounde to battaile, and commaunded, that the other men should folowe hym: whereby the enemies beleuing, that Lucullus would begin the saight, went to incounter thesame Macedonians, with soche violence, that thei were constrained to defende themselves: and so thei became against their willes, of fugetives, saighters. It importeth also to knowe, how to be assured of a towne, when thou doubteste of the fidelitie thereof, so sone as thou haste wonne the fiede, or befoze, the whiche certain old insamples maie teache thee.

Pompey doubtyng of the Catinensians, prayed the that thei would bee contente, to receiue certaine sicke menne, that he had in his armie, and sendyng vnder the habite of sicke persones, most lustie menne, gotte the towne. Publius Valerius, fearyng the fidelitie of the Epidannians, caused to come, as who saith, a Wardon to a churche without the towne, and when all the people wer gone so; Wardon, he shutte the gates, receiuyng after none in, but those whom he trusted.

Alexander Magnus, myndyng to goe into Asia, and to assure himself of Thracia, toke with him all the principall

The enemye ought not to be brought into extreme desperation.

How Lucullus constrained certaine men that ran a waile from him to his enemies, to saight whether they would or not.

A policie wherby Pompey got a towne.

How Publius Valerius assured him self of a towne.

A policie that Alexander Magnus used to be assured of all

The sixte booke

Tracia, which
Philip kynge
of Spaine did
practise to be a
sured of Eng-
land when he
wente to saint
Quintens.

Examples for
Capitaines to
winne the hartes
of the peo-
ple.

capall of thesame Prouince, giuyng theim prouision,
and he set ouer the common people of Thracia, men
of lowe degree: and so he made the Pzinces contented
with payng theim, and the people quiete, hauyng no
heddes that should disquiete them: But emong all the
thynges, with the whiche the Capitaines, winne the
hartes of the people, be the insamples of chastitie and
iustice, as was thesame of Scipio in Spaine, when he
rendered that yong woman, mosse faire of personage
to her father, and to her housebande: the whiche made
him moze, then with force of armes to winne Spaine.

Cesar hauing caused that woodde to bee paied for,
whiche he had occupied for to make the Listes; about
his armie in Fraunce, got so moche a name of iustice,
that he made easier the conquest of thesame prouince.
I cannot tell what remaineth me, to speake moze vpo
these accidētes, for that concerning this matter, there
is not leste any parte, that hath not been of vs dispu-
ted. Onely there lacketh to tell, of the maner of win-
nyng, and defendyng a toune: the whiche I am ready
to doe willingly, if you be not now wearie.

Baptiste. Your humanitie is so moche, that it ma-
keth vs to followe our desires, without beyng afraied
to be reputed presumptuous, seyng that you liberally
offer thesame, whiche we should haue been ashamed,
to haue asked you: Therefore, we saie vnto you onely
this, that to vs you cannot dooe a greater, nor a moze
gratesfuller benefite, then to finishe this reasonyng.
But befoze that you passe to that other matter, de-
clare vs a doubt, whether it bee better to continue
the warre, as well in the Winter, as thei vse now a-
daies, or to make it onely in the Sommer, and to goe
home in the Winter, as the antiquitie did.

Fabritio. See, that if the pzudence of the demaunder
were not, there had remained behinde a speciall part,
that deserueth consideration. I answer you againe,
that the antiquitie did all thynges better, and with
moze

more pꝛudence then wee: and if wee in other thynges
 commit some errour, in the affaires of warre, wee com-
 mit all errour. There is nothyng more vnderfete, or
 more perillous to a Capitaine, then to make warre
 in the Winter, and moche more perill beareth he, that
 maketh it, then he that abideth it: the reason is this.
 All the industrie, that is vsed in the discipline of war,
 is vsed so; to bee pꝛepared to faight a fielde with thy
 enemye, bicause this is the ende, whereunto a Cap-
 taine ought to goe or endeuour hymself: For that the
 foughten fielde, giueth thee the warre wonne or losse:
 then he that knoweth best how to order it, and he that
 hath his armie beste instructed, hath mooste aduan-
 tage in this, and maie beste hope to ouercome. On the
 other side, there is nothyng more enemye to thy orders,
 then the rough situations, or the cold & waterie tyme:
 so; that the rough situations, suffereth thee not to be-
 stonde thy bandes, accoꝛding to the discipline: the cold
 and waterie times, suffereth thee not to kepe thy men
 together, no; thou canste not byng theim in good or-
 der to thy enemye: but it is conuenient so; thee, to lodge
 them a sunder of necessitie, and without order, beyng
 constrained to obeye to Castelles, to Woodoughes, and
 to the Villages, that maie receiue thee, in maner that
 all thy laboure of thee, vsed to instruct the armie is
 vaine. For maruaile you not though now a daies, thei
 warre in the Winter, bicause the armies beyng with-
 out discipline, knowe not the hurte that it doeth the,
 in lodgyng not together, so; that it is no grief to the
 not to bee able to kepe those orders, & to obserue that
 discipline, whiche thei haue not: yet thei ought to see
 how moche harme, the campyng in the Winter hath
 caused, and to remember, how the Frenchemen in
 the yere of our Lorde God, a thousande five hundred
 and thre, were broken at Carillano of the Winter,
 and not of the Spanyardes: For as moche as I haue
 saied, he that assaulteth, hath more disaduauntage,

Warre ought
 not to be made
 in Winter.

Rough situa-
 tions, cold & wa-
 terie times, are
 enemyes to the
 order of warre.

An ouerthrow
 caused by win-
 ter.

As I,

then

The sixte booke.

then be that defendeth: bicause the soule wether hurteth hym not a little, beyng in the dominion of others and myndyng to make warre. For that he is constrained, either to stande together with his men, and to sustain the incommoditie of water and cold, or to auoide it, to deuise his power: But he that defendeth, maie chuse the place as he listeth, & tary him with his fre shemen: and he in a sodaine waie set his menne in arais, and goe to finde a band of thenemies men, who canot resist the violence of theim. So the Frenchemen were discomfited, and so thei shall alwaies bee discomfited, whiche will assaulte in the winter an enemye, who hath in hym prudence. When he that will that force, that orders, that discipline and vertue, in any condic-
on auaille hym not, lette him make warre in the fildes in the winter: and bicause that the Romaines would that al these thinges, in which thei bestowed so much diligence, should auaille them, fiedde no otherwise the winter, then the high Alpes, & difficulte places, and what so euer other thyng should let theim, for beyng able to shewe their art and their vertue. So this suffiseth to your demaunde, wheresoze we will come to intreate of the defending and besieging of Townes, and of their situacions and edificacions.

The

The seventh booke of the Arte of warre,
 of Nicholas Machianell, Citezeine
 and Secretarie of Florence,
 vnto Laurence Philip
 Scrozze.



Ye oughte to knowe,
 how that townes and fortres-
 ses, maie bee strong either by
 nature, or by industrie: by na-
 ture, those bee strong, whiche
 bee compassed aboute with ri-
 uers, or with fennes, as Ma-
 tina is and Ferrara, or whiche
 bee builded vpon a Rocke, or
 vpon a stepe hille, as Monaco, and Sanleo: For that
 those that stande vpon hilles, that be not moche diffi-
 cult to goe by, be now a daies, considering the artill-
 lerie and the Canes, moste weake. And therfore moste
 often times in building, thei seke now a daies a plain,
 for to make it stronge with industrie. The firste indu-
 strie is, to make the walles crooked, and full of tour-
 ninges, and of receiptes: the whiche thyng maketh,
 that thenemie cannot come nere to it, bicause he maie
 be hurte, not onely on the front, but by flankes. If the
 walles be made high, thei bee to moche subiecte to the
 blowes of the artillerie: if thei be made lowe, thei bee
 moste easie to scale. If thou makeste the ditches on the
 out side thereof, for to giue difficultie to the Ladders,
 if it happen that the enemye fill the by (whiche a great
 armie maie easely dooe) the wall remaineth taken of
 the enemye. Therfore purposyng to prouide to the one
 and thother foresaid inconueniēces, I beleue (sayyng
 alwaies better iudgement) that the walle ought to be

Townes and
 fortresses maie
 be strong thow
 waies.

The place that
 now a daies is
 moste sought
 to fortifie in.

How a Towne
 walle ought to
 bee made.

The walle of a
 town ought to
 bee high, and
 the ditch with
 in, and not
 without.

As y. made

The seventh booke.

The thicknes
that a Toun
walle ought to
bee of, and the
distances be-
tweene euery
flancher, and of
what breadth &
depth the ditch
ought to bee.

How the ordi-
nance is plac-
ed, for the de-
fence of a toun.

The nature of
the batterie.

made highe, and the Diche within, and not without. This is the moste strongesse waie of edificacion, that is made, so; that it defendeth thee from the artillerie, and from Ladders, and it giueth not facilitie to the enemye, to fill vp the diche: When the walles ought to be high, of that height as shall bee thought beste, and no lesse thick, then two yardes and a quarter, so; to make it moze difficult to ruinate. Mozeouer it ought to haue the toures placed, with distāces of. Cl. yardes betwene thone & thother: the diche within, ought to be at leaste twoo and twentie yardes and a halfe broad, and nine depe, and at the yearth that is digged out, so; to make the diche, muste be throwen towardes the Citie, and kepte vp of a walles, that muste be raised from the bot- tome of the diche, and goe so high ouer the toun, that a man maie bee covered behinde thesame, the whiche thing shal make the depth of the diche the greater. In the bottome of the diche, within euery hundred and. l. yardes, there would be a slaughter house, which with the ordinance, maie hurt whom so euer should goe doune into thesame: the greates artillerie that defende the citie, are planted behinde the walles, that shotteth the diche, because so; to defende the vtter walles, being high, there cannot bee occupied commodiously, other then smalle or meane peeces. If the enemye come to scale, the height of the firste walles moste easely defendeth thee: if he come with ordinance, it is conuenient for hym to batter the vtter walles: but it being battered, so; that the nature of the batterie is, to make the walles to fall, towardes the parte battered, the ruine of the walles commeth, finding no diche that receiveth and holdeth it, to redouble the profunditie of thesame diche: after suche sorte, that to passe any further, it is not possible, finding a ruine that with holdeth thee, a diche that letteth thee, and the enemies ordinance, that from the walles of the diche, moste safely killeth thee. Onely there is this remedie, to fill the diche: the
whiche

Whiche is moſte difficulte to dooe, as well becauſe the capacittie thereof is greate, as alſo for the difficultie, that is in commynge nere it, the walle beeyng ſtrong and concaued, betwene the whiche, by the reaſons aforeſaid, with difficultie maie be entered, hauyng after to goe by a breache througħ a ruin, whiche giueth thee moſte greate difficultie, ſo that I ſuppoſe a citee thus builded, to be altogether inuincible.

Baptiſte. When there ſhould bee made beſides the ditch within, a ditch alſo without, ſhould it not bee ſtronger?

Fabricio. It ſhould be without doubt, but myndyng to make one ditch onely, myne opinion is, that it ſtandeth better within then without.

Baptiſte. Would you, that water ſhould bee in the ditches, or would you haue them drye?

Fabricio. The opinion of men herein bee diuers, becauſe the ditches full of water, ſaueth thee from mines vnder grounde, the Ditches without water, maketh moze difficulte the ſillyng of them: but I havyng conſidered all, would make them without water, for that thei bee moze ſure: For ditches with water, haue been ſeen in the winter to bee froſen, and to make eaſie the winnyng of a citee, as it happened to Mirandola, when Pope Iulie beſieged it: and for to ſaue me from mines, I would make it ſo deepe, that he that would digge lower, ſhould finde water.

The Fortreſſes alſo, I would builde concernyng the ditches and the walles in like maner, to the intent thei ſhould haue the like difficultie to be wonne. One thyng I will earneſtly aduiſe hym, that defendeth a Citee: and that is, that he make no Bulwarkes without diſtaunte from the walle of theſame: and another to hym that buildeth the Fortreſſe, and this is, that he make not any refuge place in them, in whiche he that is within, the firſte walle beeyng loſte, maie reſiſt: That whiche maketh me to giue the firſte coun-

I diſe ditch is moſte ſureſte.

An aduertisement for the building and defending of a Towne or Fortreſſe.

The seventh booke.

saile is, that no manne ought to make any thyng, by
 meane wherof, he maie be dyuened without remedie to
 lese his firste reputation, the whiche losyng, causeth
 to be esteemed lesse his other doinges, & maketh afraied
 them, whom haue taken vpon theim his defence, and
 alwaies it shall chaunce him this, whiche I saie, whe
 there are made Bulwarke out of the Towne, that is
 to bee defended, bicause alwaies he shall lose theim,
 little thynges now a daies, beyng not able to bee de-
 fended, when thei be subiect to the furie of ordynance,
 in soche wise that lesyng them, thei be beginning and
 cause of his ruine. When Genua rebelled againste
 king Lewis of Fraunce, it made certayne Bulwarke
 aloste on those hilles, whiche bee about it, the whiche
 so sone as thei were losse, whiche was sodainly, made
 also the citee to be losse. Concernyng the second coun-
 saile, I affirme nothyng to be to a Fortresse moze pe-
 rilous, then to be in thesame refuge places, to be able
 to retire: Bicause the hope that menne haue thereby,
 maketh that thei lese the bitter warde, when it is as-
 sailed: and that losse, maketh to bee losse after, all
 the Fortresse. For insample there is freshe in remem-
 brance, the losse of the Fortresse of Furly, when Ca-
 therin the Countesse defended it againste Cesar Boz-
 gia, sonne to Pope Alexander the. vi. who had conduc-
 ted thether the armie of the king of Fraunce: thesame
 Fortresse, was al full of places, to retire out of one in-
 to an other: so that there was firste the kepe, from the
 same to the Fortresse, was a ditch after soche sorte,
 that thei passed ouer it by a draw brydge: the fortresse
 was deuided into thre partes, and euery parte was
 deuided from the other with ditches, and with water,
 and by Brydges, thei passed from the one place to the
 other: wherfoze the Duke battered with his artillerie,
 one of the partes of the fortresse, and opened part
 of the walle: For whiche cause Maister Thon Casale,
 whiche was appointed to that Warde, thought not
 good

Small Fortres-
 ses cannot bee
 defended.

A towne of war
 or Fortresse,
 ought not to
 haue in the any
 retiring places

Cesar Bogia.

good to defende that bꝛeache, but abandoned it ſo; to retire hymſelf into the other places: ſo that the Dukes men hauing entered into that parte without incoun-
ter, in a ſodaine thei gotte it all: For that the Dukes menne became lordes of the bꝛidges, whiche went frō one place to an other. Thei loſte then this Foꝛtreſſe, whiche was thought inuincible, thꝛough two defaultes, the one ſo; hauyng ſo many retiryng places, the other, bicauſe euery retiryng place, was not Lorde of the bꝛidge thereof. Therefore, the naughtie builded Foꝛtreſſe, and the little wiſedome of them that defended it, cauſed ſhame to the noble enterpriſe of the coſtelle, whoe had thought to haue abidden an armie, whiche neither the kyng of Naples, no; the Duke of Mſlaine would haue abidden: and although his inſoꝛementes had no good ende, yet notwithstanding he gotte that honour, whiche his valiauntneſſe had deſerued: The whiche was teſtified of many Epigrammes, made in thoſe daies in his pꝛaiſe. Therefore, if I ſhould haue to builde a Foꝛtreſſe, I would make the walles ſtrōg, and the diche in the maner as we haue reaſoned, no; I would not make therein other, then houſes to inhabite, and thoſe I would make weake and lowe, after ſoche ſoꝛte that thei ſhould not let him that ſhould ſtande in the middeſt of the Market place, the ſight of all the walle, to the intente that the Captain might ſee with the eye, where he maie ſuccour: and that euery manne ſhould vnderſtande, that the walle and the diche beyng loſt, the foꝛtreſſe were loſt. And yet when I ſhould make any retiryng places, I would make the bꝛidges deuided in ſoche wiſe, that euery parte ſhould be Lorde of the bꝛidges of his ſide, ordainyng, that thei ſhould fall vpon poſtes, in the middeſt of the diche.

Baptiſte. You haue ſaid that littell thynges now a daies can not bee defended, and it ſeemed vnto me to haue vnderſtoode the contrarie, that the leſſe

The cauſe of the loſſe of the Foꝛtreſſe of Fſulie, that was thought inuincible.

Tholme the houſes that are in a ſonne of war or Foꝛtreſſe ought to be builded.

ſer

The seventh booke

ser that a thyng wer, the better it might be defended,
Fabritio. You haue not vnderstoode well, because
that place cannot be now a daies called stronge, wher
he that defendeth it, hath not space to retire with
new ditches, and with new fortifications, so that the
force of the ordinance is so much, that he that trusteth
vppon the warde of one wall and of one fortification
only, is deceiued: and because the Bulwarkes (min-
dyng that they passe not their ordinarie measure, so
that then they shoulde be townes and Castels) be not
made, in suche wise that men maie haue space within
them to retire, they are losse straight wale. Therefore
it is wisdom to let alone those Bulwarkes without,
and to fortifie the entrance of the towne, and to keper
the gates of the same with turnyngs after suche sort,
that men cannot goe in nor oute of the gate by right
line: and from the tournynge to the gate, to make a
diche with a bridge. Also they fortifie the gate, with a
Percullis, so to bee abell to put therein their menne,
when they be issued out to saight, and hapnyng that
the enemies pursue them, to auido, that in the min-
gelynge together, they enter not in with them: and
therfore these be vsed, the which the antiquitie called
Cattarratte, the whiche beyng let fall, exclude the ene-
mies, and saue the freendes, so that in suche a case,
men can do no good neither by bridges nor by a gate,
the one and the other beyng occupied with paele of
menne.

Babstis. I haue seene these Perculleses that you
speake of, made in Almayne of litle quarters of
woodde after the facion of a grate of Iron, and these
percullises of ouers, be made of planks all massiue: I
woulde desire to vnderstande whereof groweth this
difference, and which be the strongest.

Fabritio. I tell you agayne, that the manners and
orders of the warre, throughe oute all the woulde, in
respects to those of the antiquitie, be extinguished,
and

The fortifying
of the entrance
of a Towne.

and in Italy they be all together losse, for if there bee a thyng somewhat stronger then the ordinarie, it groweth of the insample of other countries. You might haue vnderstoode, and these other maye remember, with how muche debilitie befoze, that kynge Charles of Fraunce in the yere of our saluacion a thousande CCCC. xliiii. had passed into Italy, they made the batelmentes not halfe a pardo thicke, the loopes, and the flankers wer made with a littell opening with out, and muche within, and with many other faultes whiche not to be tedious, I wil let passe: for that easelye from thinne batelmentes the defence is taken a waile, the flankers builded in the same maner, mosse easelie are opened: Now of the French men is learned to make the batelment large and thicke, and the flankers to be large on the part within, and to drawe together in the middest of the wall, and then agayne to waire wider vnto the vttermoste parte without: this maketh that the ordinance hardly can take a way the defence. Therfoze the French men haue, many other deuices like these, the whiche because they haue not been seen of our men, they haue not been considered. Amonge whiche, is this kinde of perculles made lyke vnto a grate, the whiche is a greate deall better then oures: for that if you haue for defence of a gate a massiue parculles as oures, lettynge it fall, you shut in your men, and you can not throught the same hurte the enemye, so that he with axes, and with fyre, maye breake it downe safely: but if it be made lyke a grate, you may it beyng let downe, throught those holes, & throught those open places, defende it with pykes, with crosbowes, and with all other kynde of weapons.

Baptiste. I haue seen in Italy an other vse after the outelandishe facion, and this is, to make the carriage of the artillerie with the spokes of the wheele crooked towards the Areltree. I woulde knowe why

Wb. J.

they

Battelmentes
ought to bee
large and thicke
and the flank-
ers large
within.

107 *The seventh booke.*

they make them so: seemingge vnto me that they bee stronger when they are made straight as those of our wheelles.

Fabritio. Neuer beleene that the thynges that differ from the ordinarie waies, be made by chauce: and if you should beleene that they make them so, to the sayzer, you are deceiued: because where strengthe is necessarie, there is made no counte of fayntesse: but all groweth, so that they be muche surer and muche stronger then ours. The reason is this: the carte when it is laden, either goeth euen, or leanyng vpon the right, or vpon the lefte syde: when it goeth euen, the wheelles equally susteine the waight, the whiche beyng equally deuided between them, doeth not burden much, but leanyng, it cometh to haue al the paise of the cariage on the backe of that whele vpon the which it leaneeth. If the spokes of the same be straight they wyl soone bryake: so that the whele leanyng, the spokes come also to leane, and not to susteine the paise by the straightnesse of theim: and so when the carte goeth euen, and when they are least burdened, they come to bee strongest: when the carte goeth awrye, and that they come to haue mooste paise, they bee weakest. Euen the contrarie hapneth to the crooked spokes of the Frenche cartes, so that when the carte leanyng vpon one syde posneth vpon them, because they be ordinary crooked, they come then to be straight, and to be abell to susteine strongly all the paise, wher when the carte goeth euen, and that they be crooked, they susteine it halfe: but let vs tourne to our citie & Fortresse. The Frenchemen vse also so moze safegarde of the gates of their towne, & so to be abell in sieges moze easely to conuey and sette oute men of them, besides the sayed thynges, an other deuise, of whiche I haue not seen yet in Italie anye insample: and this is, where they raise on the oute side from the ende of the draw brydge two postes, and vpon either

of them thei ioigne a beame, in suche wise that the one halfe of them comes ouer the brydge, the other halfe withoute: then all the same parte that cometh withoute, they ioigne together with small quarters of woodde, the whiche thei set thicke from one beame to an other like vnto a grate, and on the part within, thei fasten to the ende of either of the beames a chaine: then when they will shutte the brydge on the oute syde, they slacke the chaines, and lette downe all the same parte like vnto a grate, the whiche comyng downe, shutteth the brydge, and when they will open it, they draw the chaines, and the same cometh to rise vp, and thei may raise it vp so muche that a man may passe vnder it, and not a horse, and so much that there may passe horse and man, and shutte it againe at ones, so that it falleth and riseth as a windowe of a battlemente. This deuise is moze sure then the Parculles, because bardely it maie be of the enemye lette in suche wise, that it fall not downe, fallynge not by a righte line as the parculles, which easely maie be vnderproped. Therefore thei whiche will make a cite, oughte to cause to be ordeined all the saied thynges: & moze ouer aboute the walle, there woulde not bee suffered anye grounde to be tilled, within a myle therof, nor anye wall made, but shoulde be all champaine, wher shoulde be neither dicke nor banke, neither tree nor house, whiche might let the sight, and make defence for the enemye that incampeth.

And note, that a towne, whiche hathe the ditches without, with the banckes higher then the grounde, is mosse weake: for as muche as they make defence to the enemye, which assaulteth thee, and letteth him not to hurte thee, because easely they maie be opened, and giue place to his artillerie: but lette vs passe into the towne. I will not lose so muche time in shewing you how that besides the foresaied thynges, it is requisite to haue prouision of victualles, & wherewith to

Neither tree,
dicke, wall, til-
lage, nor anye
kynde of edifi-
cation, oughte
to bee within a
myle of a towne
of warre.

Note,

The seuench booke.

The prouision
that is meete to
be made for the
defence of a
towne.

saight, for that thei be thynges that euery man vnderstandeth, and without them, all other prouision is vaine: and generally twoo thynges ought to be doon, to prouide, and to take the comoditie from the enemye that he auaille not by the thynges of thy countrey: therfore the strawe, the beastes, & graine, which thou canst not receiue into house, ought to be destroyed. Also he that defendeth a towne, ought to prouide that no thyng be doon tumultuously and disordnately, and to take suche order, that in all accidentes euery man maie knowe what he hath to doe.

The order that ought to be taken is thus, that the women, the olde folkes, the children, and the impotent, be made to keepe within doores, that the towne maie be left free, to yonge & lustie men, whom beynge armed, must be distributed for the defence of the same, appoyntynge parte of them to the wall, parte to the gates, part to the principal places of the Citie, for to remedie those incoueniencies, that might grow within: an other parte muste not be bounde to any place, but be redde to succour all, neede requirynge: & the thinge beeynge ordeined thus, with difficultie tumulte can growe, whiche maie disorder thee. Also I will that you note this, in the besiegyng & defendynge of a Citie, that nothyng giueth so muche hope to the aduersarye to be able to winne a towne, as when he knoweth the same, is not accustomed to se the enemye: for that manie times for feare only without other experience of force, Citiees haue beene losse: Therefore a man ought, when he assaulteth a like Citie, to make all his ostentacions terribell. On the other parte he that is assaulted, ought to apointe to the same parte, whiche the enemye saighteth againste, stronge men & such as opinion maketh not afraide, but weapons only: for that if the first proosse tourne vaine, it increaseth boldnesse to the besieged, and then the enemye is constrained to overcome them within, with
bertae

What meanes
tether the enemye
moste that
besiegeth a town

What he that
besiegeth and
he that defendeth
ought to doe.

Vertue and reputacion. The instrumentes wherwith
the antiquitie defended townes, where manie: as bal-
listes, onagris, scorpions, Arcubalistes, Fustibals,
Slinges: and also those were manie with which they
gaue assaultes. As Arrieti, Collets, Musculi, Plu-
tel, Alney, Falci, testudent, in steede of which thyn-
ges be now a daies the ordynance, the whiche serue
him that bessegeth, and him that defendeth: and ther-
fore I will speake no further of theim: But let vs re-
tourne to our reasonyng, and let vs come to particu-
lar offences. They ought to haue care not to be taken
by famine, and not to be overcome throughe assaultes:
concernyng famin, it hath ben tolde, that it is requi-
sit before the siege come, to be well prouided of victu-
alles. But when a towne throughe longe siege, lack-
eth victuals, some times hath ben seen vsed certayne
extraordinarie waies to be prouided of their friends,
whome woulde saue them: in especiall if throughe the
middest of the besieged Citie there runne a riuer, as
the Romaines vittelled their castell called Casalino
besieged of Anibal, whom being not able by the riuer
to sende them other victual then Rattes, wherof cast-
yng in the same great quantitie, the which carried of
the riuer, without beyng able to be letted, fedde longe
time the Casaliniens. Some besieged, so to shew vnto
the enemye, that they haue graine moze then inough
and so to make him to dispaire, that he cannot, by
famin overcome them, haue caste breade oute of the
gates, or geuen a Bullocke graine to eate, and after
haue suffered the same to be taken, to the intent that
hisde and sounde full of graine, might shewe that a
boundance, whiche they had not. On the other parte
excellent Capitaines haue vsed sundrie waies to we-
rie the enemye.

Fabius suffered them whome he besieged, to sowe
their fieldes, to the entente that they should lacke the
same coynes, whiche they sowed.

So called
in the
to the

Aduertisements
for a besie-
ged towne

Howe the Ro-
maines vittelled
Casalino be-
sieged of An-
ibal.

A pollicie for
the besieged.

A pollicie of Fa-
bius in besie-
ging of a towne

A policie of
Dionisius in
besieginge of
a towne.

Dionisius beyng in Campe at Regio, fained to
mynde to make an agreement with them, and during
the practise therof, he caused him selfe to be prouided
of their victuals, and then when he had by this mean
got fro them their graine, he kepte them straight and
famished them.

Howe Alexander
the greake wonne
Leucadia.

Alexander Magnus myndyng to winne Leucadia
overcame all the Castels aboute it, & by that means
drawing into the same citie a great multitude, of their
owne countrie men famished them.

The besieged
ought to take
heed of the first
brynte.

Concernyng the assaultes, there hath been tolde
that chiesely they ought to beware of the first brynte,
with whiche the Romaines gotte often times manie
townes, assaultryng them sodainly, and on euerie side:
and they called it, *Aggredi vrbem coram*. As Scipio did,
when he wanne newe Carthage in Hispanie: the
which brynte is of a towne it be withstoode, with dif-
ficultie after will bee overcome: and yet thoughte it
should happen that the enemye were entred into the
citie, by overcominge the wall, yet the townes men
haue some remedie, so they forsake it not: for as much
as manie armies throughe entering into a towne, haue
ben repulced or slaine: the remedie is, that the tow-
nes men doe keepe them selues in highe places, and
from the houses, and from the towers to saighe with
them: the whiche thyng, they that haue entered in
to the citie, haue deuised to overcome in twoo man-
ners: the one with openinge the gates of the citie, and
to make the wale for the townes men, that they might
safely fle: the other with sendyng foorth a procla-
macion, that signifieth, that none shall be hurte but
the armed, and to them that cast their weapons on
the grounde, pardon shall be graunted: the whiche
thyng hath made easie the victorie of manie cities.

The remedie
that townes
men haue, whe
the enemye ar
entred into the
towne.

How to make
the townes men
yeelde.

Besides this, the Cities are easie to bee wonne, if
thou come vpon them vnawares: whiche is dooen be-
yng with thy armie farre of, after suche sort, that it be
not

How townes
or cities are ea-
sily wonne.

not beleued, either that thou wilt assaulte them, or that thou canst dooe it, without commyng openly, because of the distance of the place: wherefoze, if thou secretly and speedely assaulte them, almoste alwaies it shall followe, that thou shalt gette the victorie. I reason unwillingly of the thynges succeeded in our tyme, for that to me and to mine, it should be a burthen, and to reason of other, I cannot tel what to saie: notwithstanding, I cannot to this purpose but declare, the insample of Cesar Borgia, called duke Valentine, who beyng at Pödera with his menne, under colour of goyng to besiege Camerino, tourned to wardes the state of Urbin, and gotte a state in a daie, and without any paine, the whiche an other with moche tyme and cost, should scante haue gotten. It is conueniente also to those, that be besieged, to take heede of the deceiptes, and of the policies of the enemye, and therefore the besieged, ought not to truste to any thyng, whiche the enemye dooe continually, but let them beleue alwaies, that it is vnder deceipte, and that he can to their hurto vantage it. Domitio Calatino besieging a towne, vsed so: a custome to passe aboute euery daie, with a good parte of his menne, the wall of the same: whereby the Townes menne, beleuyng that he did it for exercise, slackted the Ward: whereof Domitius beyng aware, assaulted and ouerrame them.

Certaine Capitaines vnderstandyng, that there should come aide to the besieged, haue apareled their souldiours, vnder the Ansigne of those, that should come, and beyng let in, haue gotte the Towne.

Simon of Athens, set fire in a night on a Temple, whiche was out of the towne, wherefoze, the townes menne goyng to succour it, leste the towne in praye to the enemye. Some haue slaine those, whiche from the besieged Castle, haue gone a foragynge, and haue apareled their souldiours, with the apparell of the foragers, whom after haue gotte the towne. The anna-

ciente

How duke Valentine got the cite of Dyne

The besieged ought to take heede of the deceiptes and policies of the enemye.

How Domitio Calatino won a towne.

A policie to get a towne.

How Simon of Athens won a towne.

A policie to get a towne.

The seventh booke

How Scipio
gotte certaine
castles in As
fricke.

Howe Pirrus
won the chiefe
Citie of Scla
uonie.

A policie to get
a towne.

How the besie
ged are made
to yrde.

Howe to get a
cowne by trea
son.

A policie of As
niball for the
betraying of a
Castell.

esente Capitaines, haue also vsed diuers waies, to de
stroye the Garrison of the Towne, whiche thei haue
sought to take. Scipio beyng in Africa, and desiring
to gette certaine Castles, in whiche were putte the
Garrisons of Carthage, he made many tymes, as
though he would assaulte theim, albeit, he failed af
ter, not onely to abstaine, but to geve a waies from theim
for feare: the whiche Aniball beleuyng to bee true,
for to pursue hym with greater force, and for to bee a
ble more easely to oppresse him, drew out all the gar
risons of theim: The whiche Scipio knowyng, sente
Hanniball his Capitaine to overcome them.

Pirrus makynge warre in Sclauonie, to the chiefe
citie of thesame countrie, to where were brought many
menne in Garrison, failed to dispaire to bee able to
winne it, and turning to other places, made that the
same for to succour them, emptied it self of the warde,
and became easie to bee wonne. Many haue corrupted
the water, and haue tourned the rivers an other waie
to take Townes. Also the besieged, are easely made to
yelde them selues, makynge them afraied, with signi
fying vnto them a victorie gotten, or with new aides,
whiche come in their dissaour. The old Capitaines
haue sought to gette Townes by treason, corruptyng
some within, but thei haue vsed diuers meanes. Some
haue sente a manne of theirs, whiche vnder the name
of a fugetive, might take an hospitie and truste with
the enemies, who after haue vsed it to their profite.

Some by this meanes, haue vnderstode the maner of
the watche, and by meanes of thesame knowledge,
haue taken the Towne. Some with a Carte, or with
Beames vnder some colour, haue letted the gate, that
it could not bee shutte, and with this waie, made the
entrie easie to the enemye. Aniball perswaded one, to
giue him a castle of the Romaines, and that he should
faine to go a huntynge in the night, makynge as though
he could not goe by daye, for feare of the enemies, and

four

tournyng after with the Venison, should put in with hym certaine of his menne, and so killyng the watchmen, should giue hym the gate. Also the besieged are beguiled, with dꝛawynge them out of the Toun, and goyng a wale from them, faining to die when the assaultes. And many (among whō was Anibal) haue for no other intende, let their Campe to be taken, but to haue occasion to get betwene them and home, and to take their Tonne. Also, thei are beguiled with fayingng to departe from thē, as Forimion of Athens did, who hauyng spoiled the countrie of the Calcidensians, receiued after their ambassadours, fillyng their Cites with faire promises, & hope of safetie, vnder the which as simple menne, thei were a little after of Forimione oppressed. The besieged ought to beware of the men, whiche thei haue in suspecte among them: but some times thei are wont, as well to assure them selues with deserte, as with punishmente. Marcellus knowyng how Lucius Vancius a Polane, was tourned to fauour Anibal, so moche humanitie and liberalitie, he vled to wardes him, that of an enemye, he made him mooste frendely. The besieged ought to vse moze diligence in the warde, when the enemye is gone from them, then when he is at hande. And thei ought to warde those places, whiche thei thinke, that maie bee hurt least: for that many townes haue been losse, whē the enemye assaulteth it on the same part, where thei beleue not possible to be assaulted. And this deceipt groweth of twoo causes, either for the place being strong, and to beleue, that it is inuincible, or thꝛough craft beyng vled of the enemye, in assaltynge them on one side with sained larmes, and on the other without noyse, and with verie assaltes in deede: and therefore the besieged, ought to haue greate aduertisment, and aboue all thynges at all times, and in especially in the night to make good watche to bee kepte on the walles, and not onely to appointe menne, but Dogges, and soche

How the besieged maie be beguiled.

How Forimion overcame the Calcidensians.

What the besieged must take heed of.

Liberalitie maketh enemies frendes.

The diligence that the besieged ought to vse in their watche & ward.

The seventh booke.

Hearse Passiues, and liuely, the whiche by their sente maie deserue the enemye, and with barkyng discouer him: and not Dogges onely, but Geese haue ben seen to haue saued a citie, as it happened to Roome, when the Frenchemen besieged the Capitoll.

An order of Alcibiades for the be-
sieging of
watch & warbe

Alcibiades for to see, whether the warbe watched, Athens being besieged of the Spartaines, ordained that when in the night, he should lifte vp a light, all the ward should lifte vp likewise, constitutyng punishment to hym that obserued it not.

The secreete
conceyting
of Letters.

Thucydides of Athens killed a watchman, which slept, sayng, that he leste him as he found him. Those that haue been besieged, haue vsed diuers meanes, to sende aduise to their frendes: and myndyng not to send their message by mouth, they haue writtē letters in Cifers, and hidden them in sundrie wise: the Cifers be accordyng, as pleaseth him that ordaineth them, the maner of hidyng them is diuers. Some haue writtē within the scabarde of a sword: Other haue put the Letters in an vnbacked losse, and after haue baked the same, and giuen it for meate to hym that caried them. Certaine haue hidden the, in the secretest place of their bodies: other haue hidden them in the collar of a Dogge, that is familiare with hym, whiche carrieth them: Some haue writtē in a letter ordinarie thinges, & after betwene thone line and thother, haue also writtē with water, that wettyng it or warning it after, the letters should appere. This waie hath been mooste politikely obserued in our time: where some myndyng to signifie to their frendes inhabityng within a towne, thinges to be kept secret, and myndyng not to truste any person, haue sente common matters writtē, accordyng to the common vse and enterlined it, as I haue saied aboue, and the same haue made to be hanged on the gates of the Temples, the whiche by counterfig-nes being knowne of those, vnto whome they haue been sente, were taken of and redde: the whiche way

is moſte politique, bicauſe he that carrieth them maie
bee beguiled, and there ſhall happen hym no perill.
There be moſte infinite other waies, whiche euery
manne maie by himſelf rede and finde: but with moze
facilitie, the beſieged maie bee witten vnto, then the
beſieged to their frēdes without, ſoꝛ that ſoche letters
cannot be ſent, but by one, vnder colour of a ſuggetiue,
that cometh out of a toun: the whiche is a daunge-
rous and perillous thing, when the enemye is any whit
craftie: But thoſe that ſende in, he that is ſente, maie
vnder many colours, goe into the Campe that beſie-
geth, and from thens takynge conueniente occaſion,
maie leape into the toun: but lette vs come to ſpeake
of the preſent winnyng of townes. I ſaie that if it hap-
pen, that thou bee beſieged in thy citee, whiche is not
ordained with ditches within, as a little before we ſhe-
wed, to mynde that the enemye ſhall not enter thꝛough
the breach of the walle, whiche the artillerie maketh:
bicauſe there is no remedie to lette theſame from ma-
kyng of a breach, it is therefore neceſſarie ſoꝛ thee,
whileſte the ordinance battereth, to caſte a ditch with-
in the wall which is battered, and that it be in bredth
at leaſte twoo and twentie yardes and a halfe, and to
throwe all theſame that is digged towardeſ the town,
whiche maie make a banke, and the ditch moze deper:
and it is conuenient ſoꝛ thee, to ſollicitate this worke
in ſoche wiſe, that when the walle falleth, the Diche
maie be digged at leaſt, ſower oꝛ ſiue yardes in depth:
the whiche ditch is neceſſarie, while it is a digging,
to ſhutte it on euery ſide with a ſlaughter houſe: and
when the wall is ſo ſtrong, that it giueth thee time to
make the ditch, and the ſlaughter houſes, that batte-
red parte, cometh to be moche ſtronger, then the reſt
of the citee: ſoꝛ that ſoche ſoꝛtificacion, cometh to haue
the ſoꝛme, of the ditches which we deuised within: but
when the walle is weake, and that it giueth thee not
tyme, to make like ſoꝛtificacions, then ſtrengthe and

To defence as
gainſt a breach

C. g.

ballaunt

The ſeuenth booke.

ballauntneſſe muſte bee ſhewed, ſettyng againſte the enemies armed menne, with all thy ſorce. This manner of ſortification was obſerued of the Wiſans, when you beſieged them, and they might doe it, becauſe they had ſtrong walles, whiche gaue them time, the yearth being ſoſte and moſte meete to raiſe vp bankes, and to make ſortifications: where if they had lacked this commoditie, they ſhould haue loſt the towne. Therefore it ſhall bee alwaies prudently doon, to prouide a ſore hand, making ditches within the citee, & thorough out all the circuite thereof, as a little beſore wee deuiſed: ſo that in this caſe, the enemye maie ſafely be tarried ſo at laiſure, the ſortifications being ready made.

How the antiquitie got townes by mining vnder grounde.

The antiquitie many tymes gotte townes, with mining vnder ground in twoo maners, either they made a waie vnder grounde ſecretely, whiche riſſe in the towne, and by theſame entered, in whiche maner the Romaines toke the cities of Aleienti, or with the mining, they ouerthrewe a walle, and made it ruinate: this laſte waie is now a daies moſte ſtronge, and maketh, that ſuch cities placed high, be moſt weake, becauſe they maie better bee vnder mined: & putting after in a Caue of this Gunne powder, whiche in a momente kindelyng, not onely ruinateth a wall, but it openeth the hilles, and vtterly diſſolueth the ſtrength of them.

The remedie againſt Caues or vnderminynges.

The remedie ſo for this, is to bulde in the plain, and to make the ditch that compaſſeth thy citee, ſo deepe, that the enemye maie not digge lower then theſame, where he ſhall not finde water, whiche onely is enemye to the caues: ſo if thou be in a towne, which thou defendeſt on a high ground, thou canſt not remedie it otherwiſe, then to make within thy walles many deepe Welles, the whiche be as downers to theſame Caues, that the enemye is able to obtaine againſt thee. An other remedie there is, to make a caue againſte it, when thou ſhouldeſt bee aware where he mineth, the whiche waie eaſely hindereth hym, but difficultly

It is foreseen, beyng besieged of a craftie enemy. He that is besieged, ought about al thinges to haue care, not to bee oppressed in the tyme of resse: as is after a battaile fought, after the watche made, whiche is in the Mornyng at bryake of daie, and in the Euenyng betwen daie and night, and about al, at meale times: in whiche tyme many townes haue been wonne, and armies haue been of them within ruinated: therefore it is requisite with diligence on all partes, to stante alwaies garded, and in a good part armed. I will not lacke to tell you, how that, whiche maketh a citee or a campe difficult to be defended, is to be diuised to kepe sundryed all the force, that thou hast in them, so that the enemy beyng able to assaulte thee at his pleasure altogether, it is conueniente for thee on enery side, to garde every place, and so he assaulteth thee with all his force, and thou with parte of thine defendest thee. Also, the besieged maie bee overcome altogether, he without cannot bee, but repulced: wherefoze many, whom haue been besieged, either in a Campe, or in a Towne, although they haue been inferiour of power, haue issued out with their men at a sodaine, and haue overcome the enemy. This Marcellus of Pola did: this did Cesar in Fraunce, where his Campe beyng assaulted of a moste great number of Frenchmen, and seeyng hymself not able to defende it, beyng constrained to deuise his force into many partes, and not to bee able standyng within the Lisses, with violence to repulce the enemy: he opened the campe on thone side, and turning towarde the same parte with all his power, made so moche violence against them, and with so moche valiantnes, that he vanquished & ouercame them. The constancie also of the besieged, causeth many tymes displeasure, and maketh afraied them that doe besiege. Pompei beyng against Cesar, and Cesars army beyng in greate distresse throught famine, there was brought of his bryd to Pompei, whom seying it

What care the besieged ought to haue,

What maketh a citee or campe difficulte to be defended.

By what means they that besiege are made afraied.

Thou art got by
constancie.

made of grasse, commaunded, that it should not bee
shewed vnto his armie, least it shoulde make them a
fraide, seying what enemies they had against theim.
Nothyng caused so muche honour to the Romaines
in the warre of Aniball, as their constancie: for as
much as in what so ever enusoug, and aduerse so:
tune thei were troubled, they neuer demanded peace,
thei neuer made anie signe of feare, but rather when
Aniball was aboute Rome, thei solde those fieldes,
where he had pitched his campe, dearer then ordina
rie in other times shoulde haue been solde: and they
stoode in so much obstinacie in their enterprises, that
for to defende Rome, thei would not raise their campe
from Capua, the whiche in the verie same time that
Rome was besieged, the Romaines did besiege.

I knowe that I haue tolde you of manie thyn
ges, the whiche by your selfe you might haue under
stoode, and considered, notwithstanding I haue doon
it (as to daie also I haue tolde you) for to be abell to
shewe you better by meane therof, the qualitie of this
armie, and also for to satisfie those, if there be anie,
whome haue not had the same commoditie to under
stand them as you. For me thinkes that there rekketh
other to tell you, then certaine generall rules, the
whiche you shal haue mozte familiar, which be these.

Generall rules
of warre.

The same that helpeth the enemye, hurteth thee:
and the same that helpeth thee, hurteth the enemye.

He that shall be in the warre mozte vigilant to ob
serue the deuises of the enemye, and shall take mozte
payne to exercise his armie, shall incurre least perilles
and maie hope mozte of the victorie.

Neuer condaucte thy men to saight the field, if first
thou hast not confirmed their mindes & knowest them
to be without feare, and to be in good order: for thou
oughtest neuer to enterprise any dangerous thyn
g with thy souldiours, but when thou seest, that they
hope to ouercome,

It is better to conquer the enemy with famine,
then with yron: in the victorie of which, fortune make-
doe much more then valiantnesse.

No purpose is better then that, which is hidde
from the enemy untill thou haue executed it.

To know in the warre how to vnderstande occa-
sion, and to take it, helpeth more then any other
thyng.

Nature breedeth few stronge menne, the industrie
and the exercise maketh manie.

Discipline make doe more in warre, then furie.

When any departs from the enemies side, so to
come to serue thee, when they be faithfull, they shalbe
vnto thee alwaies great gaires: for that the power of
theaduersaries are more diminished with the losse of
them, that runne awaie, then of those that be slaine,
although that the name of a fugitiue be to new fren-
des suspected, to olde odious.

Better it is in pitchyng the feldes, to reserve be-
hynde the first fronte aide inoughe, then to make the
fronte bigger to disperse the souldiours.

He is difficultely overcome, which can know his
owne power and the same of the enemy.

The valiantnesse of the souldiours availeth more
then the multitude.

Some times the situation helpeth more then the
valiantnesse.

New and sudden thynges, make armies affrayed.

Slowe and accustomed thynges, be littell regarded
of them. Therefore make thy armie to practise and to
know with small faightes a new enemy, before thou
come to faight the felde with him.

He that with disorder followeth the enemy after
that he is broken, will doe no other, then to become
of a conquerour a loser.

He that prepareth not necessarie victualles to live
vpon, is overcome without yron.

The seuenth booke

He that trusteth moze in horsemen then in foete-
men, or moze in footemen then in horsemen, must ac-
comodate him selfe with the situation.

When thou wilt see if in the daie there be comen-
anie spie into the Campe, cause euerie man to goe to
his lodgynge.

Change purpose, when thou perceiuest that the
enemie hath fo:seene it.

How to cons-
ulte.

Consulte with many of those thinges, which thou
oughtest to dooe: the same that thou wilt after dooe,
conferre with fewe.

Souldiours when thei abide at home, are mainte-
ned with feate and punishmente, after when thei ar-
led to the warre, with hope and with rewarde.

Good Capitaines come neuer to saight the filde,
excepte necessitie constrainc them, and occasion call
them.

Cause that the enemies know not, how thou wilt
order thy armie to saight, and in what so euer maner
that thou ordainest it, make that the first bande may
be receiued of the seconde and of the thirde.

In the saight neuer occupie a battell to any other
thyng, then to the same, for whiche thou haste apoin-
ted it, if thou wilt make no disorder.

The sodene accidentes, with difficultie are reame-
died: those that are thought vpon, with facilitie.

What thyn-
ges are the
strength of the
warre.

Men, yron, money, and bzead, be the strengthe of
the warre, but of these sower, the first thwoe be moste
necessarie: because men and yron, finde money and
bzeade: but bzeade and money fynde not men e yron.

The vnarmed riche man, is a bootie to the pooze
souldiour.

Accustome thy souldiours to dispise delicate liuyng
and laciulus aparell.

This is as muche as hapneth me generally to re-
member you, and I know that there might haue ben
saied manie other thynges in all this my reascnyng:

as should be, how and in howe manie kinde of waies
the antiquitie ordered their bandes, how thei apparel-
led them, and how in manie other thynges they exer-
cised them, and to haue toygned herevnto manie other
particulars, the whiche I haue not iudged necessarie
to shew, as wel so; that you your self may se them, as
also so; if my intente hath not been to shew iuste how
the olde seruys of warre was appointed, but howe in
these daies a seruys of warre might be ordained, whi-
che should haue moze vertue then the same that is vs-
ed. Wherefore I haue not thought good of the auncient
thynges to reason other, then that, which I haue
iudged to suche introduction necessarie. I know also
that I might haue delated moze vpon the seruice on
horsebacke, and after haue reasoned of the warre
on the Sea: so; as muche as he that distinguisheth
the seruys of warre, saith, how there is an armie on
the sea, and of the lande, on foote, and on horsebacke.
Of that on the sea, I will not presume to speake, so;
that I haue no knowledge therof: but I will let the
Genoues, and the Venetians speake therof, whome
with like studies haue heretofore doen great thinges.
Also of horses, I wil speake no other, then as afoze
I haue saied, this parte beyng (as I haue declared)
least corrupted. Besides this, the footemen being wel
ordained, which is the puissance of the armie, good
horses of necessitie will come to be made.

Onely I counsel him that would ordayne the exer-
cise of armes in his owne countrey, & desireth to fill the
same with good horses, that he make two prouisions:
the one is, that he distribute Mares of a good race
throughe his dominion, and accustom his menne
to make choise of coltes, as you in this countrey make
of Calues & Mules: the other is, that to the entente the
excepted might finde a byer, I woulde prohibet that
no man should kepe a Mule excepte he woulde kepe
a horse: so that he that woulde kepe but one beaste to

Do J. ride

Provisions
that maie bee
made to fill a
Realme full of
good horse.

The ſeuenth booke.

ride on, ſhoulde be conſtrained to keepe a horſe: and moreover that no man ſhould weare fine cloathes except he which doeth keepe a horſe: this order I vnderſtande hath bene deuised of certaine princes in our ſine, whome in ſhort ſpace haue therby, brought into their countrey an excellent numbre of good horſes. Aboute the other thynges, as much as might be looked for concernynge horſe, I commit to as much as I haue ſaid to daie, and to that which they vſe. Where aduenture alſo you woulde deſire to vnderſtand what condicions a Capitaine ought to haue: wherof I ſhall ſatiffie you moſte byeſtly: for that I cannot tell how to choſe any other man then the ſame, who ſhoulde know howe to doe all thoſe thynges which this daie hath ben reaſoned of by vs: the which alſo ſhould not ſuffiſe, when he ſhould not knowe howe to deuise of him ſelfe: for that no man wout inuencion, was euer excellent in any ſcience: and if inuencion cauſeth honour in other thynges, in this aboue all, it maketh a man honozable: for euery inuencion is ſeen, although it were but ſimple, to be of walters celebrated: as it is ſeen, where Alexander Magnus is praiſed, who for to remoue his Campe moſte ſecretely, gaue not warning with the Trumpette, but with a batte vpon a Launce. And was praiſed alſo for hauynge taken order that his ſouldiours in buckelynge with the enemies, ſhoulde kneele with the lefte legge, to bee able more ſtrongly to withſtande their violence: the which hauynge geuen him the victorie, it got him alſo ſo muche praiſe, that all the Images, which were erected in his honour, ſtoode after y ſame ſacion. But becauſe it is tyme to finiſhe this reaſonynge, I wil turne againe to my firſt purpoſe, & partly I ſhall anſwer the ſame reproofe, wherin they vſe to condemne in this towne, ſuch as knoweth not when to make an ende.

The knote
ledge that a ca-
pitaine oughte
to haue.

proportion of
the ſame with
the ſame
to the ſame
the ſame

The euerſo
to weth to his
firſt purpoſe

If you remembre Coluſus you tolde me, that I be-
yng of one ſide an exalter of the antiquitie, and a diſ-
praiſer

praiser of those, which in waightie matters imitated them not, and of the other side, I hauinge not in the affaires of war, wherein I haue take paine, imitated them, you could not perceine the occasion: wherunto I answered, how that men which wil doo any thing, muste firste prepare to knowe how to doe it, so; to be able, after to vse it, when occasion permitteth: whether I doe know how to byng the seruise of warre to the auncient manners or no, I will be iudged by you, whiche haue hearde me vpon this matter longe dispute: wherby you may know, how much time I haue consumed in these studies: and also I beleene that you maie imagen, how much desire is in me to bynge it to effect: the whiche whether I haue been able to haue doen, or that euer occasion hath been geuen me, most easely you maie coniecture: yet so; to make you moze certaine and so; my better iustificacion, I will also aledge the occasions: and as much as I haue promised, I will partely perfozme, to shew you the difficultie and the facelitie, whiche bee at this presente in suche imitations.

maketh a littell discorde to make an ende of his reasoning.

Wherfore I saie, how that no verbe y is doen now a daies among men, is moze easie to be reduced into y aunciente maners, then the seruise of Warre: but by them onely that be Princes of so moche state, who can at least gather together of their owne subiectes, xv. or twentie thousande yong menne: otherwise, no thyng is moze difficulte, then this, to them whiche haue not soche commoditie: and so; that you maie the better vnderstande this parte, you haue to knowe, howe that there bee of twoo condicions, Capitaines to bee praised: The one are those, that with an armie ordained thzough the naturalle discipline thereof, haue doen greate thynges: as were the greater parte of the Romaine Citezeins, and suche as haue ledde armies, the whiche haue had no other paine, then to maintaine them good, and to se them guided safely: the other are

A prince may easely bynge to intire perfection the seruise of warre.

Two sortes of Capitaines worthe to be praised.

The seventh booke.

they, whiche not onely haue had to overcome the enemy, but befoze they come to the same, haue been constrained to make good and well ordered their armie: who without doubt deserue muche moze praise, then those haue deserued, which with olde armies, & good, haue valiantely wrought. Of these, such wer Pelopida, and Epaminonda, Tullus Hostilius, Phillip of Macedony father of Alexander, Cyrus kyng of the Persians, Cincinnatus a Romanne: they all were dyuen first to make their armies good, and after to saighte with them: they all coulde doe it, as well throughte their prudence, as also for haupnge subiectes whome they might in like exercises instruct: no; it shuld neuer haue ben otherwise possible, y^e anie of theim, though they had ben neuer so good & ful of al excellencie, should haue been able in a straunge countrey, full of men corrupted, not bled to anie honest obedience, to haue brought to passe anie laudable worke. It sufficeth not then in Italie, to know how to gouerne an army made, but first it is necessarie to know how to make it & after to know how to commaunde it: & to do these thinges it is requisite they bee those princes, whome haupng much dominion, & subiectes inoughe, maye haue commoditie to doe it: of whiche I can not bee, who neuer commaunded, no; cannot commaunde, but to armies of strangers, and to men bounde to other, and not to me: in whiche if it be possible, or no, to introduce anie of those thynges that this daie of me hath ben reasoned, I will leaue it to your iudgement.

Albeit when coulde I make one of these souldiours which now a daies practise, to weare moze armour then the ordinarie, and besides the armour, to beare their owne meate for two or thre daies, with a mastocke: When coulde I make theim to digge, or keepe theim euery daie manie howers armed, in fained exercises, for to bee able after in the verie thyng in dede to preuaile: When woulde they abstaine from plate, from

laciulose

inclinationnes, from swearynge, from the insolence, whiche euerie daie they committe: when would they be reduced into so much discipline, into so much obedience and reuerence, that a tree full of apples in the middest of their Campe, shoulde be founde there and leste vntouched? As is redde, that in the auncient armies manie times hapned.

What thyng maye I promise them, by meane wherof thei may haue me in reuerence to loue, or to feare, when the warre beyng ended, they haue not anie moze to doe with me: wherof maye I make them ashamed, whiche be bozne and brought by without shame? whie shoulde thei be ruled by me who knowe me not? By what God or by what saintes may I make them to sweare? By those that thei worship, or by those that they blasphem? Who they worship I knowe not anie: but I knowe well they blasphem all. How shoulde I beleene that thei will keepe their promise to them, whome euerie howe they dispise? How can they, that dispise God, reuerence men? Then what good fashion shoulde that be, whiche might be impessed in this matter?

And if you shoulde aledge vnto me that Snyppers and Spaniardes bee good souldiours, I woulde confesse vnto you, how they be farre better then the Italians: but if you note my reasonynge, and the maner of proceeding of bothe, you shall see, howe they lacke many thynges to ioygne to the perfection of the antiquitie. And how y^e Snyppers be made good of one of their naturall vses caused of that, whiche to daie I tolde you: those other are made good by mean of a necessitie: soz that seruyng in a straunge countrie, and seemyng vnto them to be constrained either to die, or to overcome, thei perceiuyng to haue no place to fle, doe become good: but it is a goodnesse in manie partes sawtie: soz that in the same there is no other good, but that they bee accustomed to tarie the enemye at the pike and sweardes poyncte: noz that, which thei lacke, no

The seventh booke.

man should be meete to teache them, and so much the lesse, he that coulde not speake their language.

The Author ex-
cuses the peo-
ple of Italie to
the great repro-
che of their
princes for
their ignorance
in the affaires
of warre.

But let vs turne to the Italians, who for hauinge not had wise Princes, haue not taken anie good order: and for hauing not had the same necessitie, which the Spaniards haue hadde, they haue not taken it of theiſelues, so that they remaine the shame of the worlde: and the people be not to blame, but onely their princes, who haue ben chastised, and so their ignorance haue ben iustely punished, leeing moste shamefully their states, without shewing anie vertuous ensample. And if you will see whether this, that I say be trew: consider how manie warres haue ben in Italie since the departure of kyng Charles to this day, where þ war beyng wonte to make men warlike & of reputation, these the greater & fiercer that they haue been, so muche the more they haue made the reputation of the members and of the headdes thereof to bee losse. This proueth that it groweth, that the accustomed orders were not nor bee not good, and of the newe orders, there is not anie which haue knowen how to take them. Nor neuer beleue that reputaciõ will be gotten, by the Italians weapons, but by the same waie that I haue shewed, & by means of theiſe, that haue great states in Italie: for that this forme maye be impressed, in simple rude men, of their owne, and not in malicious, ill brought vp, and straungers. Nor there shall neuer bee sounde anie good mason, which will beleue to be able to make a faire image of a peece of Marble ill helued, but verie well of a rude peece.

A description
of the foolish-
nesse of the Ita-
lian princes.

Our Italian Princes beleued, before thei tasted the blowes of the outlandishe warre, that it should suffice a Prince to knowe by wistynge, how to make a subtil answer, to wiste a goodly letter, to shewe in faynges, and in wordes, wiste and promptnesse, to knowe how to canuas a fraude, to decke theiſelues
with

With precious ſtones and gold; to ſleepe & to eate with greater glorie then other: To keepe many laſcious perſones aboute them, to gouerne them ſelues with their ſubiectes, couetouſly and proudeſy: To rotte in idleneſſe, to giue the degrees of the exerciſe of warre, ſo; good will, to deſpiſe if any ſhould haue ſhelved the any laudable waie, minding that theſe wordes ſhould bee answers of oracles: no; the ſely wretches were not aſware, that thei prepared them ſelues to bee a prey, to whom ſo euer ſhould aſſaulte them. Hereby grewe then in the thouſande ſower hundred nintie and ſower yere, the greates feares, the ſodain flightes, & the marueilous loſſes: & ſo thre moſt mightie ſtates which were in Italie, haue been diuers times ſacked & deſtroied. But that which is worſe, is where thoſe y remaine, continue in the verie ſame erreure, & liue in the verie ſame diſorder, & conſider not, that thoſe, who in old time would kepe their ſtates, cauſed to be doorn theſe thynges, which of me hath been reaſoned, & that their ſtudies wer, to prepare the body to diſeaſes, and the minde not to feare perilles. And hereby grewe that Ceſar, Alexander, and all thoſe menne and excellent pꝛinces in old tyme, were the ſo;moſte amongeſt the ſaighters, goyng armed on foote: and if thei loſte their ſtate, thei would looſe their life, ſo that thei liued and died vertuoſly. And if in them, or in parte of them, there might bee condẽpned to muche ambition to reaſon of: yet there ſhall neuer bee ſounde, that in them is condẽpned any tenderneſſe, or any thyng that maketh menne delicate and ſeable: the whiche thyng, if of theſe pꝛinces were redde and beleued, it ſhould be impoſſible, that thei ſhould not change their ſo;me of liuing, and their pꝛouinces not to chaunge fortune. And ſo; that you in the beginnyng of this our reaſonnyng, lamented your ordinaunces, I ſaie vnto you, that if you had ordained it, as I aſore haue reaſoned, & it had giuen of it ſelf no good experience, you might
with

Ceſar and Alexander, were the ſo;moſte in bat
tell.

The seventh booke

The Venetians
and the duke of
ferare began
to haue reduced
the warfare to
the Aunciente
maner.

He that despis-
eth the things
of warre, des-
pisech his own
welfare.

With reason haue been greued therewith: but if it bee
not so ordained, and exercised, as I haue saied, it maie
be greued with you, who haue made a counterfalte
theroof, and no perfecte figure. The Venetians also,
and the Duke of ferare, beganne it, and followed it
not, the whiche hath been thzough their faulte, not
thzough their menne. And therfore I assure you, that
who so euer of those, whiche at this daie haue states in
Italie, shall enter firste into this waie, shall be firste,
besoze any other, Lorde of this prouince, and it shall
happen to his state, as to the kyngdome of the Macedo-
nians, the whiche commyng vnder phylip, who had
learned the maner of setting armies in order of Epas-
minondas a Thebane, became with this order, and
with these exercises (whyleste the reste of Grece floode
in idlenesse, and attended to risite comedes) so puissat,
that he was able in few yeres to possesse it all, and to
leauie soche foundation to his sonne, that he was able
to make hymself, pynce of all the world. He then that
despisech these studies, if he be a pynce, despisech his
pyncedome: if he bee a Citizein, his Citie. Wherefoze,
I lamente me of nature, the whiche either ought
not to haue made me a knowler of this, or it ought to
haue giuen me power, to haue been able to haue exe-
cuted it: For now beyng olde, I cannot hope to haue
any occasion, to bee able so to dooe: In consideration
whereof, I haue been liberall with you, who beeyng
graue yong menne, maie (when the thynges saied of
me shall please you) at due tymes in fauour of your
pynces, helpe theim and counsaile them, wherein I
would haue you not to bee afrated, or mistrustfull, bi-
cause this prouince seemes to bee altogether giuen,
to raise vp againe the thynges dedde, as is seen by the
perfection that poesie, paintyng, and wyting, is now
brought vnto: Albest, as moche as is looked for of me,
beyng strooken in yeres, I do mistruste. Wherefore
I, if fortune had heretofore graunted me so moche
state,

The seventh booke. Fol. Cix.

Kate, as sufficeth for a like enterpryse, I would not
haue doubted, but in moſte ſhorte tyme, to haue ſhe-
wed to the worlde, how moche the aunciente or-
ders anaille: and without peraduenture, ei-
ther I would haue increased it with
gloze, or loſte it without ſhame.

The ende of the ſeuenth and laſte booke of the arte
of warre, of Nicholas Machiavel, Citezein and
ſecretarie of Flozence, translated out of
Italian into Engliſhe: By Peter
Whiteborne, ſelow of Graiſe
Inne.



Cr. 1.

Nichol

Nicholas Machiauel, citezein and
Secretarie of Florence, to
the Readers.

In thetente that such as rede this booke
make without difficultie vnderstande the
order of the battailes, or bandes of men,
and of the armies, and lodgynges in the
Campe, accoꝝdunge as they in the dis-
cription of theim are apointed, I thinke it ne-
cessarie to shewe you the figure of euerie one of them:
wherfore it is requiset firste, to declare vnto you, by
what poyntes & letters, the footemen, the horsmen,
and euerie other particuler membze are set soozthe.

Know therfore that

c	}	Target men.	
c	}	Pike men.	
v	}	a Capitaine of ten men.	
r	}	Veliti ordinarie.	which are those me that shote with harcebus tes or bowes.
C	}	Veliti extraordinari	
k	}	a Centutrition or cap- taine of a hundred men.	
H	}	a Constable or a captaine of a band of fower hundred and fiftie men.	
G	}	The hed captain of a maine battel.	
t	}	The general Captaine of the whole armie.	
d	}	The Trompet.	
b	}	The Drum.	
f	}	The Ansigne.	
m	}	The Standerde.	
l	}	Men of Armes.	
A	}	Light horsmen.	
	}	Artillerie or ordinance.	

In the first figure next folowynge, is described the forme of an ordinarie battaile or bande of soldier hundred and fiftie men, & in what maner it is redoubled by flanke. And also how with the verie same order of lxxx. ranks, by chaungynge onely to the hinder parte the five ranks of pikes which were the foremost of euery Centurie, they may likewise in bringynge them in battaile rate, come to bee placed behinde: whiche may be doen, when in marchynge, the enemies should come to assaulte them at their backs: accordynge as the orderynge therof is before declared. Fol. rrry. fol. rrrv.

In the seconde figure, is shewed how a battaile or bande of men is ordered, whiche in marchynge should be giuen to fight on the flanke: accordynge as in the booke is declared. fol. rrrv.

In the thirde figure, is shewed how a battaile or bande of men, is ordered with two hoynes, Fol. rrrv. and after is shewed how the same may be made with a void place in the myddest: accordynge as the orderynge therof, in the booke moste plainly is declared, fol. rrrvj.

In the fourth figure, is shewed the forme or faction of an armie appointed to fight the battaile with the enemies: and for the better vnderstandynge thereof, the verie same is plainlier set forth in the figure next vnto it, wherby the other two figures next folowynge may the easier be vnderstoode: accordynge as in the booke is expessed. Fol. rliij.

In the fiftie figure, is shewed the forme of a soldier square armie: as in the booke is described. Fol. lxxij.

In the sixte figure, is shewed howe an Armie is brought from a soldier square faction, to the ordinarie forme, to fight a fielde: accordynge as afoze is declared. Fol. lxxij.

In the seventh figure, is described the maner of encamping: accordynge as the same in the booke is declared. Fol. lxxviij.

The firste

This is the
maner of order
ing of CCCC
men, into. lxxx.
rankes, five to
each, to bring
them into a. iii.
square battaile
with the pikes
on the front, as
after foloweth.

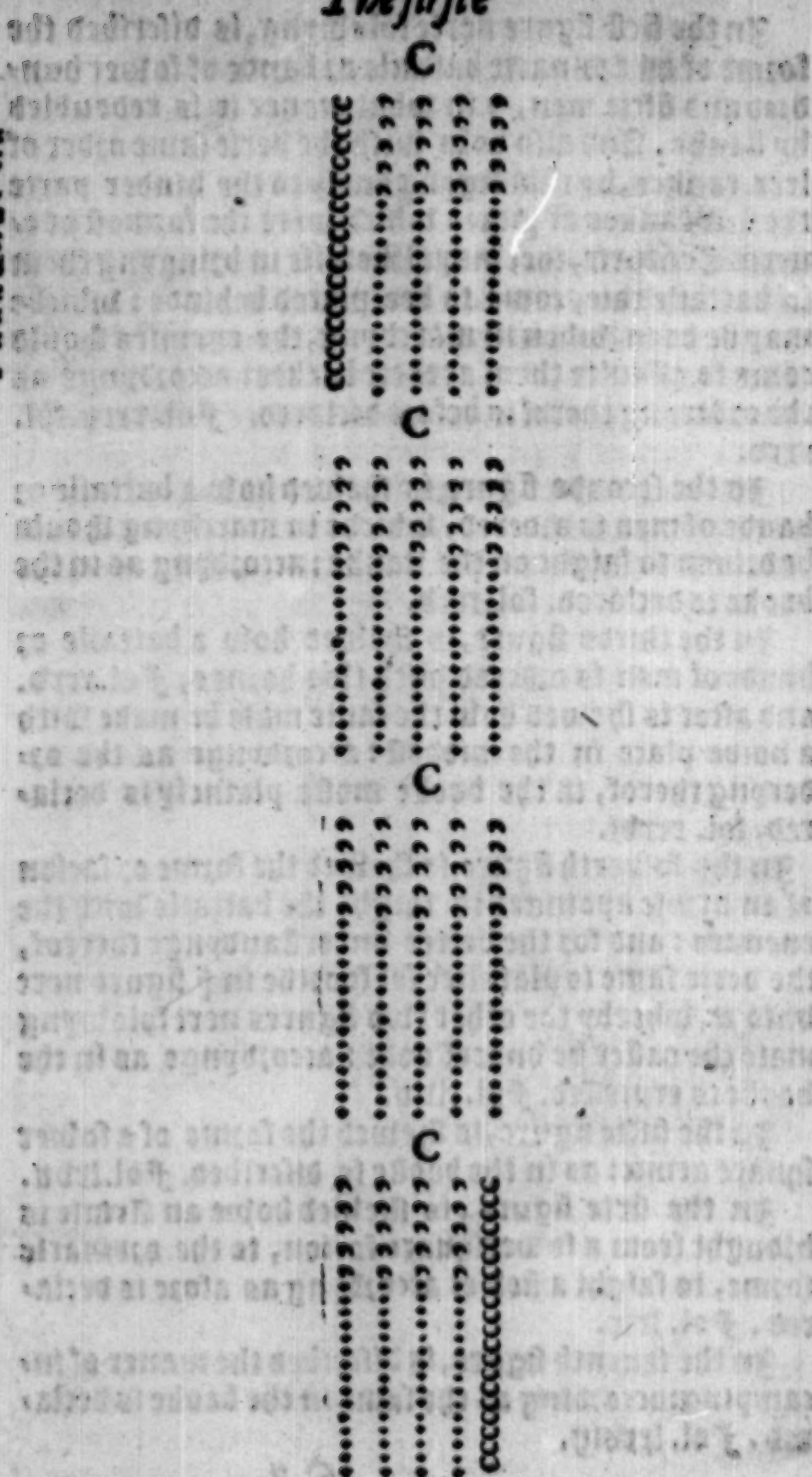
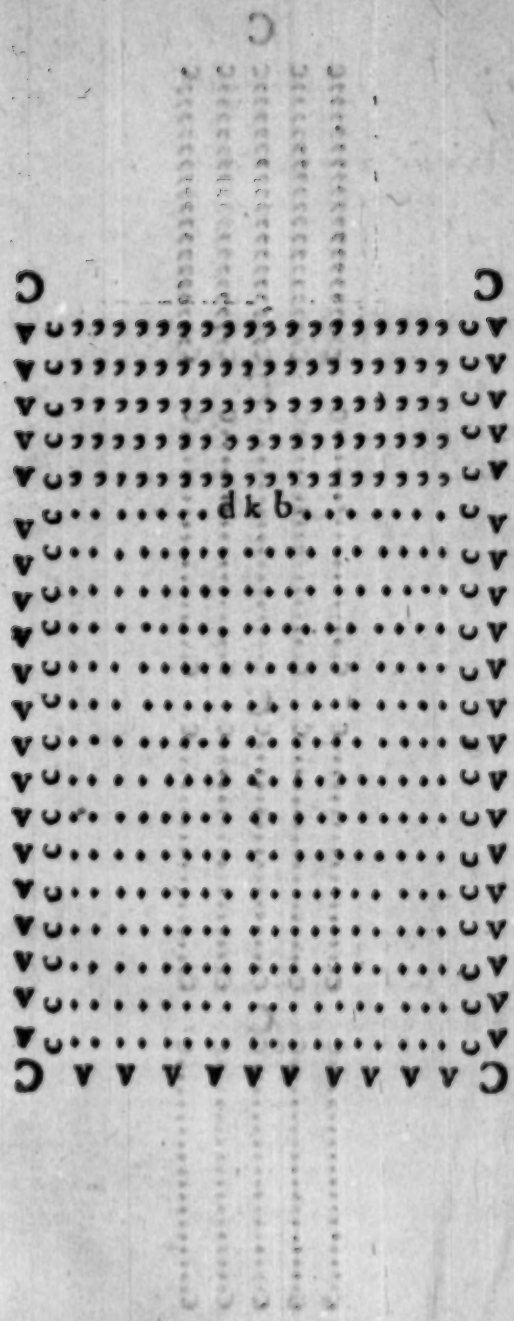


Figure.



This is the
 explained. lxxx.
 cannes. of. lxxx.
 C. men brought
 into a fower
 square battaile
 with the p. ides
 on the fronte.
 And the fiftie
 Welitt on the
 sides & on the
 backe.

The seconde

This is the
maner of orde-
ring of cccc
men, into. lxxx.
ranks, for to a
rank, to bring
them into a. lxxx.
square battaile
with the which
on the side, as
after followeth.

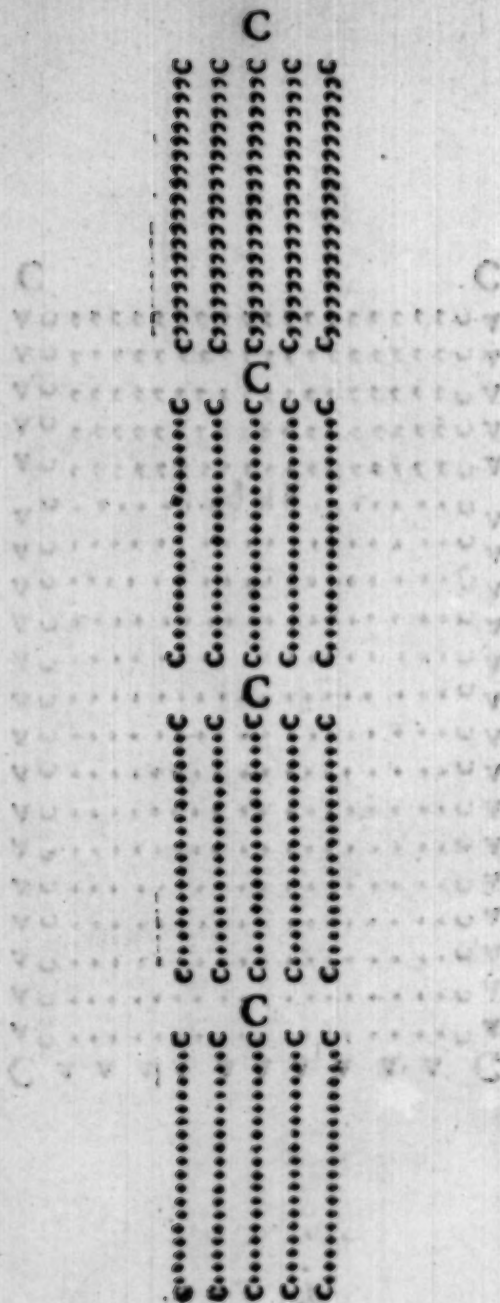
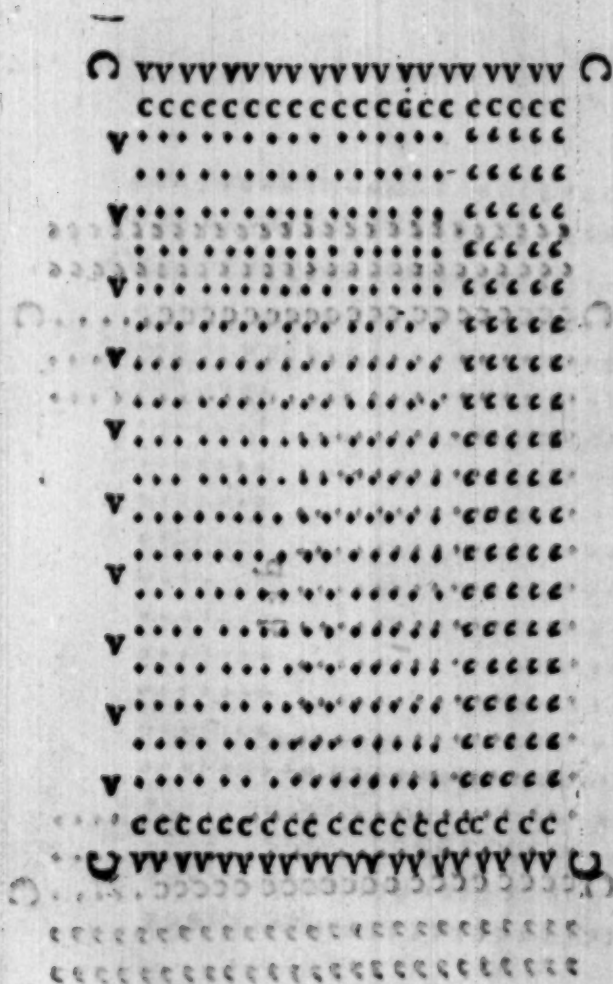


Figure.



This is the
 foresaid. lxxx.
 cautes. of. mii.
 C. men brought
 into a square
 square battail
 with the V. then
 on the side.

The thyrd

These are the
numbers of men
now appointed
to make the
honed battall
of the square
battall with
the void space
in the middle,
as after folo-
weth.

able to the
combined fact.
there is a full
of the strength
of the power
of the power
of the power
of the power
of the power

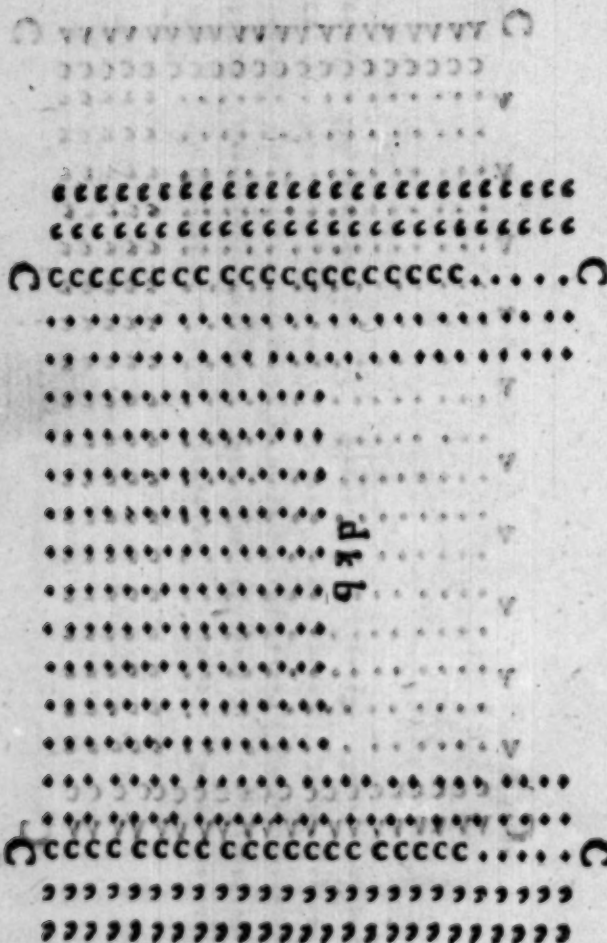
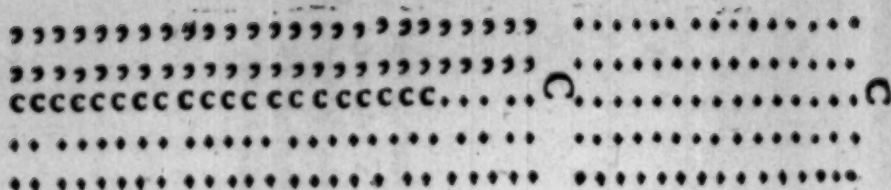
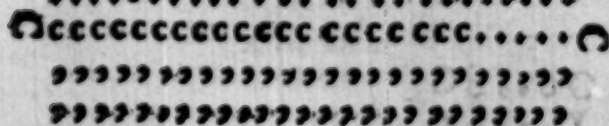
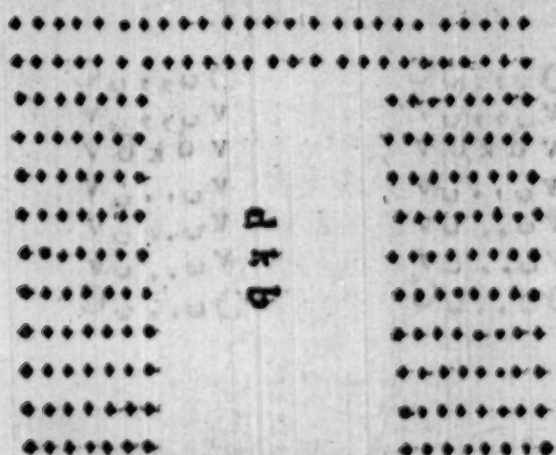
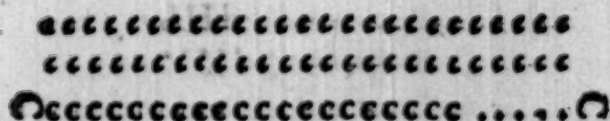
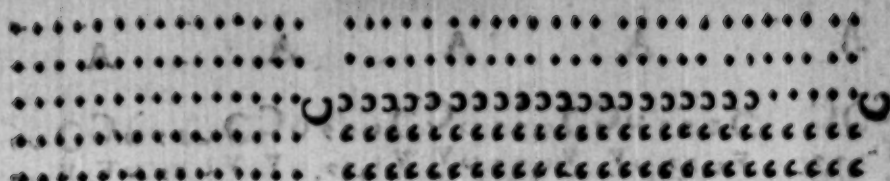


Figure.



F.L.S.

The fourth

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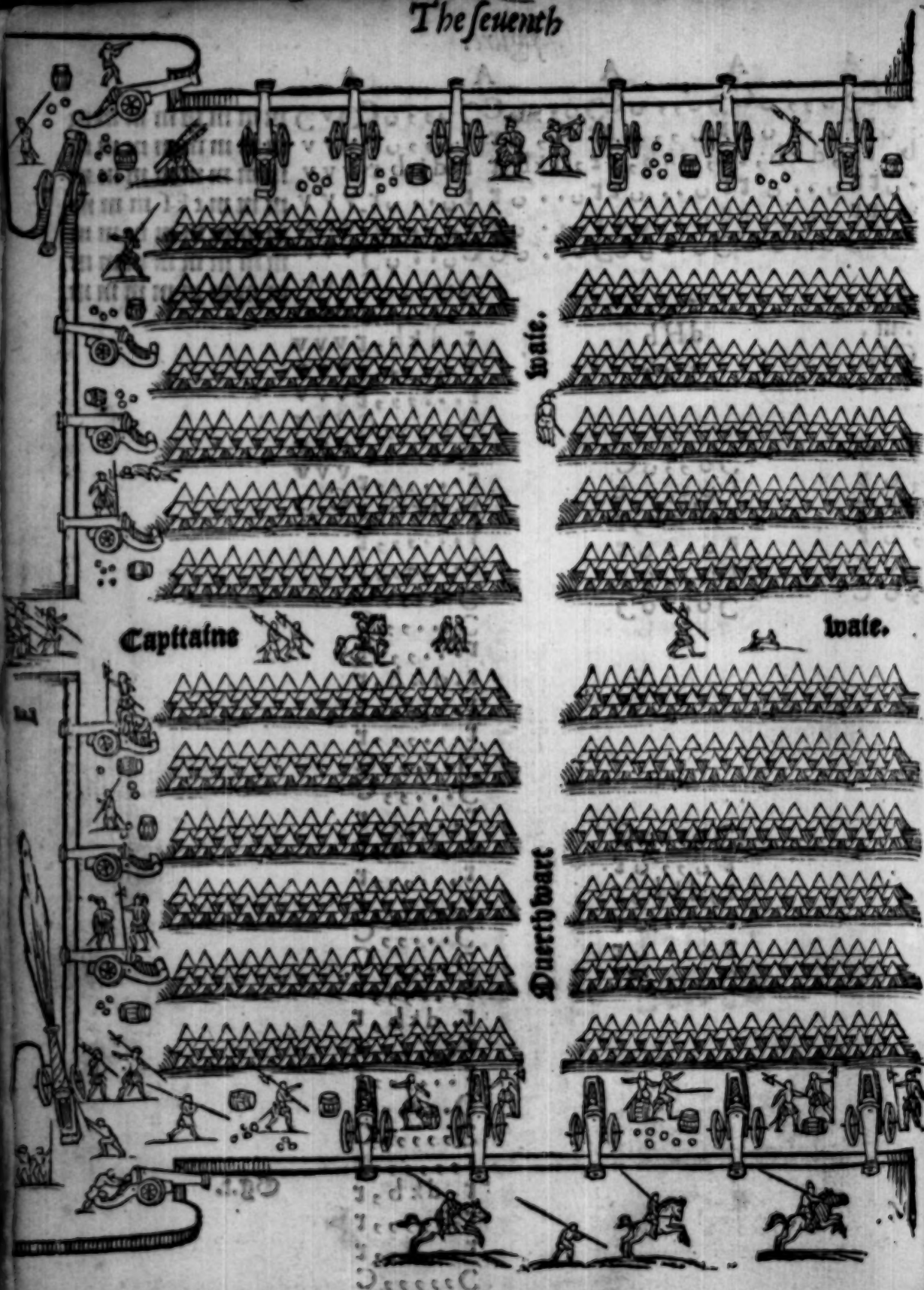
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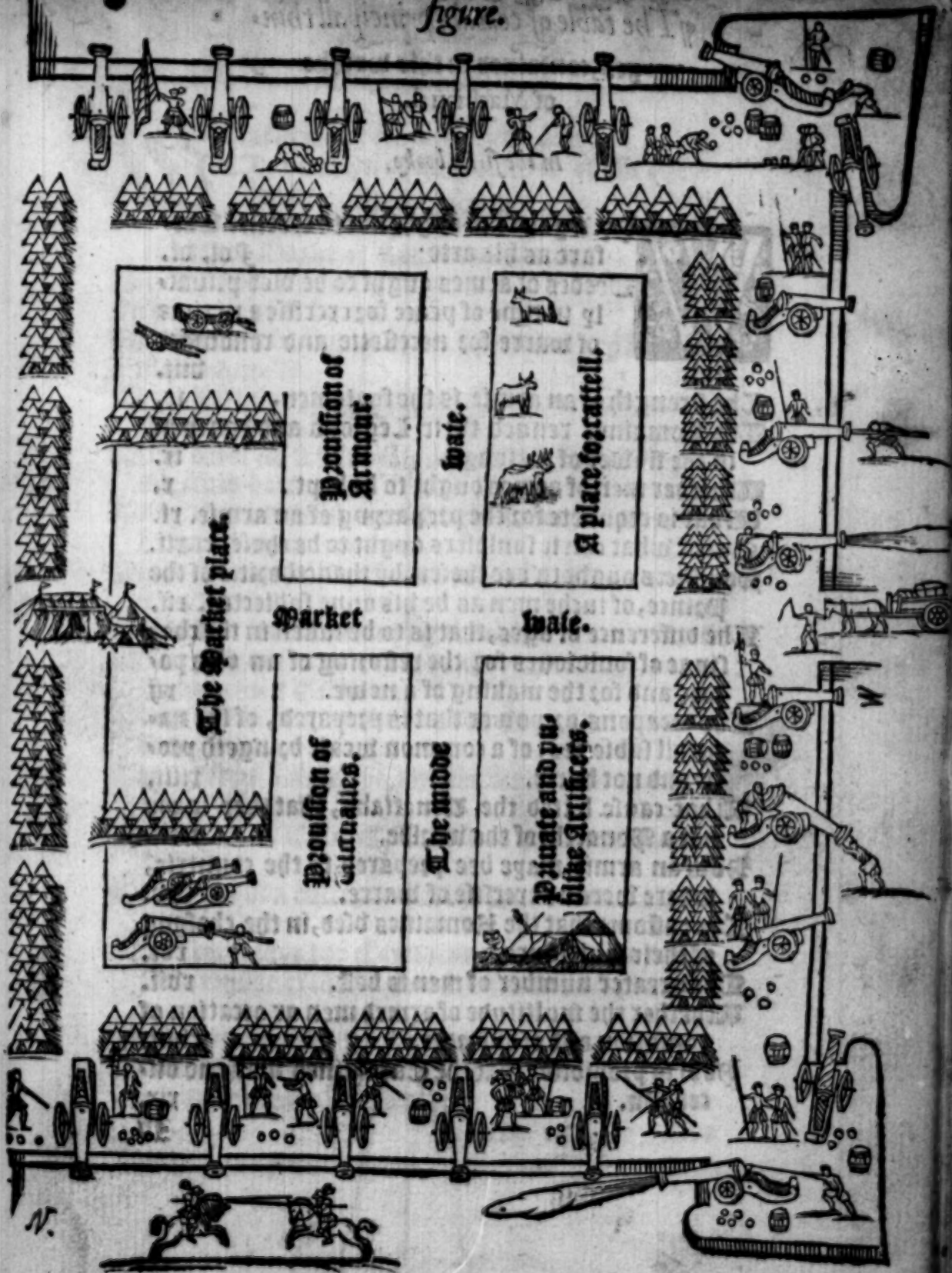
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t k f

The seventh





The table of certain principall thinges, contained in this booke of Machiauel.

In the firste booke.



- W**hy a good mā ought not to exercise warfare as his arte. fol. vi.
- W**eedes of armes ought to be vsed priuately in time of peace for exercise & in time of warre for necessitie and renoume. biii.
- Fol.**
- T**he strength of an armie is the footemen. ix.
- T**he Romaines renued their Legions and had men in the flower of their age. ix.
- W**hether men of armes ought to be kept. x.
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- S**ouldiers ought to bee chosen, by thauthoritie of the Prince, of such men as be his owne subiectes. xii.
- T**he difference of ages, that is to be taken in the choosing of souldiours for the restoring of an olde power and for the making of a newe. xii.
- T**he weapons or power that is prepared, of the naturall subiectes, of a common weale bringeth profit and not hurte. xiii.
- W**hat cause letteth the Venetians, that they made not a Monarch of the world. xiii.
- H**ow an armie maye bee prepared in the countrie, where were no exercise of warre. xv.
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- T**he greater number of men is best. xvii.
- W**hether the multitude of armed men at occasion of confusion and of disorder. xviii.
- H**ow to prohibite, that the Capitaines make no discussion. xix.
- In**

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The cause whye the Romaines were overcome of the parthians.	rrbi.
What order, or what vertue maketh, that footemen ouercum horsemen.	rrbi.
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¶ g ij

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the campe, and what punishmente they ought to
haue that doo not their dutie. lxxij.

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armies and idell games to be vsed. lxxv.

How to incampe accordinge to the number of men,
and what number of menne maie suffice againste,
what so euer enemye that wer. lxxviij.

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Secrete conueying of letters.	Cj.
The defence againste a breache.	cxj.
Generall rules of warre.	cij.

The ende.

Th. i.

These are strong, either by nature or by
the power of the medicine.



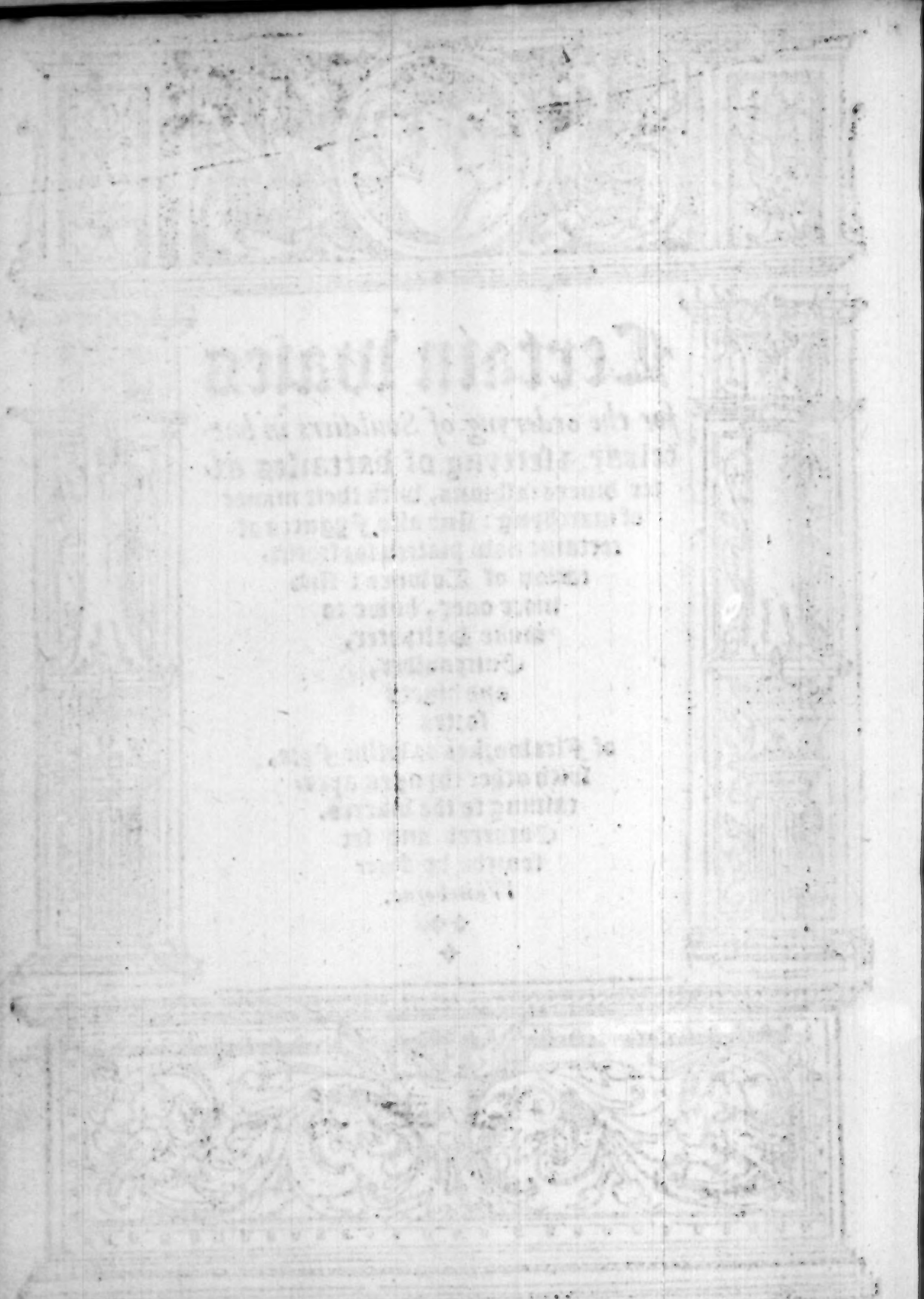
These are strong, either by nature or by
the power of the medicine.



Certain waies

for the orderynge of Souldiers in bat-
telray, a setting of battailes, af-
ter diuers fashions, with their maner
of marchynge: And also Fygures of
certaine new plattes for fortifi-
cation of Townes: And
more ouer, howe to
make Saltpeter,
Gunpowder,
and diuers
sortes
of Fireworkes or wilde Fyre,
with other thynges ap-
taining to the warres.
Gathered and set
foorth by Peter
Whiteborne,





¶ A PERFECTE RYLE TO BRINGE

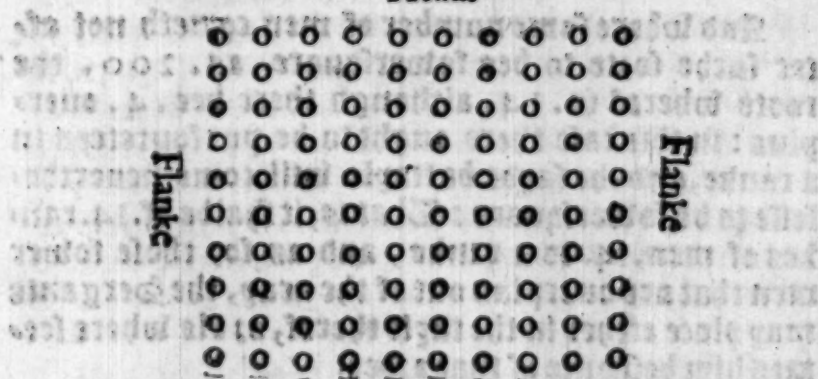
men into a square battell, of vvhath num-
ber so euer they be. Cap. 1.



Let to make a square
Battell of a number of men,
or of an Armie, the sower
square roote or quadzant nū-
ber of them, must be taken,
and so many as y^e same roote
conteynes, so many ought to
be set in araye. As for exam-
ple in a littel number, for the
better vnderstandyng therof:

Admit there be a . 100 . men, the soursquare roote of
a . 100 . ought to be taken out, which is ten: Then put-
tyng ten of these men in a ranke, there will be tenne
rankes, ten to a ranke. Whiche ten rankes playnge
them ordynarely, the one behinde the other, so that al
the distances that shalbe between man and man, as
well on the sides, as before and behynde be equall,
suche . 100 . men will make a soursquare battayle, as
by the figure here folowynge apereth.

Head.



At But

The orderynge of Souldiers

But for that, men ordered in battelraye, stande not, nor marche not, as aboue is supposed, I meane in equall distance, for that euery man (as Vegetius affirmeth) would haue for largenesse three foote, that is from shoulder to shoulder, and for length seven foote, that is three foote before him, and three foote behinde him, and one foote that his owne person will occupie, for whiche cause the aboue wrytten order, men standynge accoordinge to the saied ordinarie distance, shall not be a full sowersquare, but y length therof shall be. 70. foote, and the bredthe. 30. foote, as appereth by the figure folowynge.



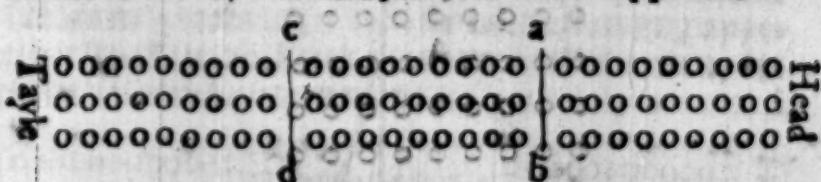
And where some number of men cometh not after suche sorte to be sowersquare, as. 200. the roote wherof is. 14. although there bee. 4. ouerplus: in this case there ought to be put foureteen in a ranke, and the sayde battayle will come neuertheless to be sowersquare: That is, it shall be of. 14. rankes of men. 14. to a ranke, and as for those sower men that are ouerplus out of the aray, the Serrgante may place either in the tayle therof, or els where seemes him best oute of that order.

Likewyse after this maner, an armie of men howe greate a number so euer it be, may be brought into a sower.

foresquare, as for example, admitte there were an
armie of .35000. of these .35000. men, the foresquare
roote is to be taken out, accorbyng to the order that
I have declared before, and the same shalbe founde to
be .187. and .31. men remainyng ouerplus, so that
placyng .187. men in a ranke, suche an armie will be
in facion foresquare, that is, it will amounte vnto
187. rankes. 187. men for a ranke. And as for the .31.
odde men, the Capitaine may appointe where he shal
thinke good.

To know how many men may marche in a
ranke, and at a sudden to bryng them into a
foresquare battell, so that their Ansigne, may
come to be in the middelt. Cap. 2.

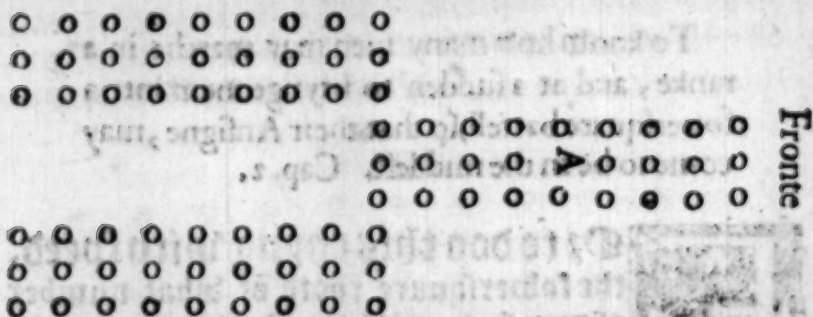
For to doo this thyng with speed,
the foresquare roote of what number
of men so euer it be, is straight way to be
taken: and if the same roote be so that it
may be equally deuided into thre, so ma-
nie as shall be the thirde parte of that roote, so manie
of the sayed men for a ranke ought to marche by the
waye. As for example, if the men that are to be con-
ducted, be .81. the roote of those .81. muste be taken, the
which is .9. And for as much as the roote of this may
equally be deuided into .3. and the thirde parte ther-
of beynge .3. the sayed .81. men must therfore be made
to marche in joinyng thre in a ranke, & they shall
make in all .27. rankes, as here vnder appereth.



And when need is that they must be brought in-
to a foresquare battel, all these .27. rankes would be
A 19 deuided

The orderynge of Souldiers

deuided into thre equall partes, as is declared by a b. and c. d. So that to enery parte there come to remaine 9. rankes, thre men in a ranke, and afterwarde the fyrste parte that is in the fronte muste be caused to staye, and the other twaine to procede sozwarde, the one on the right hande, and the other on the left hand of the fyrste (now standynge still) vntill the head of fronte of either of the saied twoo partes doe vnite or come to be euenth with the head of the fyrste, and there to stay. As by the figure folowing may be vnderstode.



The whiche thre partes thus brought and ordered, shall make a sowersquare bartell, as apereth by this sygure folowynge: and to cause that the Ansigne doo fall in the middest of suche a battell, alwayes it ought to be placed in the middest of the fyrst parte, as besoze apereth in the poynte. A.



But to know how to deuide the saied. 27. rankes into thzee equall portions without standyng to tel. 9. rankes, consideryng that if it were a greate number of men, it shoulde be a thyng very long so to doo: therfore seyng that to euerie number of men, ther is commonly placed a ranke of Harkabutters or Bowemen in the Forewarde, and an other in the Rerewarde, in this figure aboue wytten of solwer scoze men and one, there would be. 18. Harkabutters: that is. 9. in the Forewarde, and. 9. in the Rereward: and setting twoo rankes of Harkabutters in the places where the deuissions are to bee made, as hereafter appereth in figure, vnderstanding the Harkabutters by this letter H.

H 000000000 H H 000000000 H H 000000000 H
H 000000000 H H 000000000 H H 000000000 H
H 000000000 H H 000000000 H H 000000000 H

By those Harkabutters you may alwayes vnderstande where the diuissions are to be made of the saied 27. rankes, and likewise in cuery other greater number. And when such a roote cannot bee deuided into thzee equall partes, of necessity there must remayne ouer one or twoo. Now let vs firste take for example this, where remayneth ouer one, as it shoulde be if it were a hundred men, the roote wherof is ten, which ten deuided into thzee, cometh to thzee times thzee, & one remainyng ouerplus. Wherfore there muste be made. 10. rankes to marche. 3. and. 3. (that is so many rankes as the number of the roote is of) and other. 10. rankes. 4. and. 4. together, and the last. 10. rankes also thzee and thzee together: as here folowynge appereth with their. 20. Harkabutters or Bowemen, besydes the saied hundred men.

H 000000000 H H 000000000 H H 000000000 H
H 000000000 H H 000000000 H H 000000000 H
H 000000000 H H 000000000 H H 000000000 H

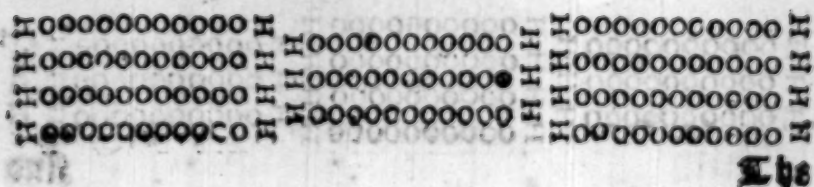
Fronte
And

The orderynge of Souldiers

And these thre partes when it is needful to byng them into a fowlersquare battell, muste be ordered as aboue is rehearsed, or els causynge the fyrste parte in the fowrwarde to stave, and to make the seconde part to procede onward untill the head or fronte of the seconde part come to be even with the head of the first, & so the saied seconde part standynge still, to cause also the thirde part to procede fowrwarde after the same manner, the which thyng beyng don, such a battell shalbe brought into fashon fowlersquare, with their Barkabutters or Bowemen besoze and behynde: as apereth by this figure.



But when in devisyng the saied roote there shall happen to remayne .2. overplus, as shoulde be when ther were. 121. the roote wherof is. 11. which. 11. partynge into. 3. comes to. 3. times. 3. and two remaynyng overplus (as I have saied) in this case and in other lyke, I woulde make 2. 11. rankes to marche (that is, as many as the roote conteynes). 4. men in a ranke, and an other. 11. rankes. 3. men together in a ranke, and the other. 11. rankes also. 4. men to a ranke: As hereafter apereth in figure, with their. 22. Barkabutters, besyde the saied. 121. men.



The whiche men alwaies, when they woulde be brought into a fower square battell, muste be ordered as before is declared.

And this rule may serue like wyse in what littel or great number so euer it be, as well quadzante as not quadzante. As for example only in wordes: put the case that there bee .3969. whereof beyng minded to know how many men in a ranke should be caused to marche together by the waye, so that commodiously they may at a sodden bee brought into a fower square battell, there muste be taken the quadzante roote of this number of men (by the same waye that I have taught) whiche shall be founde to be .63. so that on euery syde of the square battell shall be .63. rankes of men, and so as much as this roote (whiche is. 63.) may be deuided into. 3. equall partes, the thirde parte therof is to be taken (for a generall rule) that is. 21. & therfore. 21. men in a ranke woulde be made to marche together by the way. And alwaies there shall be as many rankes in a lather. 21. to a ranke, as are thye times so many as the roote is of, whiche is, thye times 63. whiche comes to. 189. so .189. rankes of men shall be the number therof after. 21. to a ranke. And by the roote that is. 63. you may vnderstande that suche deuision is to be made betwene. 63. and . 63. so that the firste parte shalbe as well. 63. as also the seconde and the thirde. In which deuisions the twoo double rankes of Harkabutters are to be placed for the redier knowledge to bringe them into a square battell.

But if in deuyding the roote into thye, there shoulde remayne. 1. ouerplus, as shoulde happen if the presumed men were . 5776. the roote wherof beyng. 76. whiche roote deuided into. 3. shall come vnto. 25. and one to remayne ouerplus. Now I saye, that all the rankes that riseth of these men, shal be not withstandinge thye times so many as the roote, that is thye times. 76. whiche makes. 228. And so as much as all

The orderng of Souldiers

these orders of rankes, are deuided euermoze into .3. partes (as befoze hath been declared) .76. rankes to a parte (that is so many as the roote is of) therefore it is to be vnderstande, that the first and the last of these three partes muste be made to marche .25. menne in a ranke, whiche is as muche as is the thirde parte of the roote, and so; that there remaineth one ouerplus (as aboue appereth) I say y^e the same one must be put alwaies in the seconde part, whiche is in the middest. I meane causynge those of the saied seconde parte, to march .26. men in a ranke, so y^e the first & the last part of the great rewe of rankes, be .25. men in a ranke, & the seconde parte to bee .26. men in a ranke, and the verye same ought to be doon of euery other roote that may be deuided into three, where onely remaineth ouerplus one, but when there remayneth ouerplus .2. it foloweth cleane contrarie: For that the firste and the laste parte, would be of one man moze, then the same that the thirde parte of the roote is of. As for ex- ample if the saied men were .2809, the roote whereof is .53. whiche deuided into these, comes to .71. and .2. remainyng ouerplus: therefore of so many men, ther shall be made .159. rankes (that is three times .53.) whiche .159. rankes deuidynge them also into three partes, cometh vnto .53. to a parte, that is the number of the roote. And the firste and thirde part would be of one man moze then the thirde parte of the roote, that is, it would be of .18. men to a ranke, and the seconde parte, whiche is the parte in the middest, would be the very thirde parte of the roote: y^e is, 17. men to a ranke, so that of all the .159. rankes, as wel the first .53. rankes, as likewise the laste .53. rankes, ought to be of .18. men to a ranke, & the .53. rankes in the middest would be onely of .17. men to a ranke. And, wherin partynge the roote into .3. there remaineth ouerplus only one, it goeth cleane contrarie to this. For that the firste and the thirde parte of the
saied

fated great reio of rankes, will alwaies be of as many
 men to a ranke as shalbe the whole thirde parte of the
 roote, and the middell parte, which is the second, will
 be of one man moze then the thirde part of the roote.
 And so; as much, as there can neuer remaine ouer-
 plus aboue one or twoo in deuidyng the roote into. 3.
 therfoze this foresaid rule shall serue in what num-
 ber of men so euer it bee, as well Quadzante as not
 Quadzant, so; that lyke as befoze is sated in numbers
 not Quadzante, alwaies ther is taken y roote which
 goeth nerest to such a number, and therwith to doo
 acco;dyngly, as aboue hath ben sated. And as so; the
 residue of the men that cometh to be ouerplus of the
 Quadzante of such a roote, may be placed some other
 where as shall be thought moste best. Fo; example if
 there were. 4000. men, whiche number is not
 Quadzante, yet notwithstandinge of the same num-
 ber there ought to bee taken oute the nerest roote
 therof, whiche is. 63. so that there shall remayne o-
 uerplus. 31. men, whome myndyng in a sudden to
 byng into a fower square battell, there ought to be
 put in a ranke. 63. men, and such a battell shal come
 to be fower square, as in the beginning hath ben said:
 and where there remaines ouerplus those. 31. men,
 the Serigiant may place them as he shal thinke good.
 Likewise myndyng to raise those. 4000. men to
 marche, there ought also to be taken the nerest roote
 therof, which as aforesaid, is. 63. whiche deuidyng
 into thzee, comes vnto thzee times. 21. and nothing
 remainyng ouerplus. And therfoze the sated menne
 ought to be caused to marche. 21. in a ranke, and the
 sated ranke to be deuided into thzee partes. 63. to a
 ranke acco;dyng to the foresaid rule, in suche sozte
 that the last parte shall be. 64. rankes, and also. 10.
 men moze, because of those. 31. men that were ouer-
 plus in the beginning, the whiche as hath been sated,
 remained out of the aray: And after the same maner,

The orderynge of Soulniers

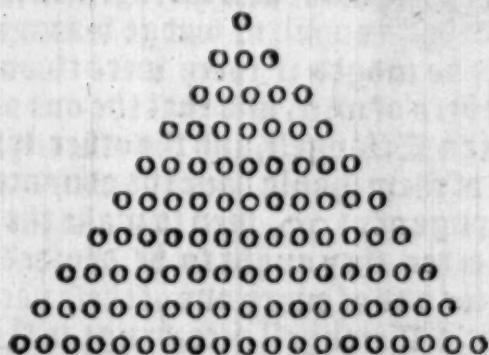
It is to be doon when the roote of such a number that is not quadzante, doeth not agree with the perfect division by thzee, which is, if there be ouerplus one, to procede as aboue hath been declared, I meane. to put a man moze in a ranke to the middel parte, and to the other twoo partes, the fyrst, and the thirde, to put onely so manie men in a ranke, as the thirde parte of the roote shal conteine, and when there remayneth ouerplus twoo, to procede cleane contrarie: that is, to put a man moze in a ranke to the firste, and to the thirde parte, and to the seconde, to put onely so many men in a ranke, as the thirde parte of the roote shal be of, and those men that are remainynge ouerplus, in takynge out the roote in the beginning, to place them as aboue I haue saied.

How to ordeine a number of men or an armie into a battell, lyke vnto a vvedge, or three square, so that it may be apte to marche vwith the pointe thereof towarde the enemies. Cap. 3.

This fashion of battell, is made after this maner, fyrst placynge one man, and after thzee, and nexte fve, and after seuen, and then. 9. after a. 11. and so to increase alwaies twoo men moze, till suche time as there be no moze men to place. Albeit there may be suche a number of men, that at the lasse they can not, or there shall not be sufficient to make vp the last ranke, whiche hapnyng, those men may be leste out of the araisse to serue where their Captaine shall thynke moste meete, so; that the lyke hapneth often times, and in euerie maner of orderynge men, that alwaies there resteth some man out of the aray. And so; the better vnderstandynge hereof: admit so; example that the menne that is to bes bzought into a thzee square

square battell be a . 100. I say that first one is to be placed, after. 3. after. 5. after. 7. after. 9. after. 11. and so to procede: addynge alwaies twoo men moze in a ranke, untill they be all placed, as heresolowynge apereth in figure. Where the last ranke in this case, shall come to be. 19. men, not remainyng any man ouerplus: and this is, for that the number of men, (which is . 100.) is a Quadzante number: and like wise in euery other number that is Quadzante, the saied Triangle battell shall be made withouts anie man remainyng ouerplus.

Head



But if the saied number of men be not a quadzant number alwaies there shal remayne ouerplus so many men, as the saied number of menne shall be moze then þe greate quadzant number contained of the same: as for example, if þe presuposed men to make the thre square battell were . 120. I saye that there shall remaine ouerplus. 20. men out of the aray of the thre square, that is so many as the . 120. exceedeth . 100. (beyng the greater quadzante number contained in the same) whiche also shall be . 20. but if the saied men were . 123. there should remaine ouerplus only twoo men, for as much as the greatest quadzant nu-

The orderynge of Souldiers

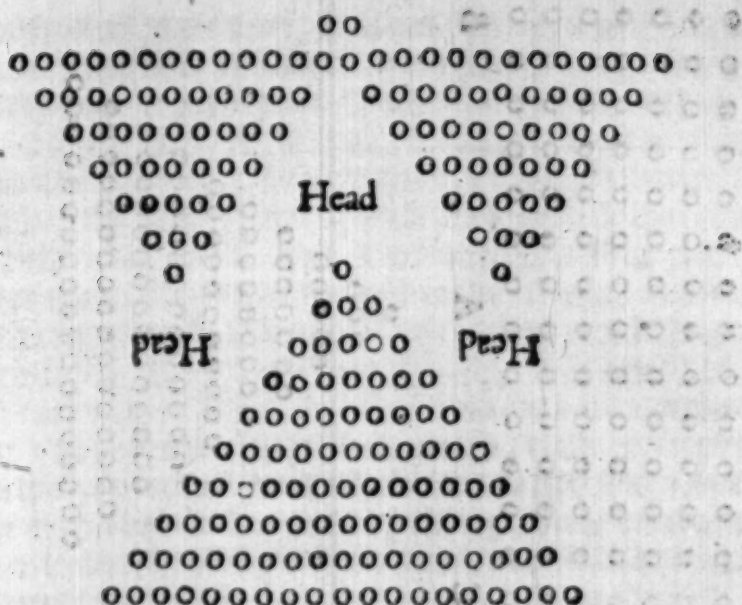
ber that can be taken of. 123. Shall be. 121. and. 123
is moze then the saied. 121. by the saied twoo, and the
very same is to be vnderstand in euery great number.

To make the battell called the Sheeres, vvhiche
in olde time they vsed to set against the Triangell,

Cap. 4.



The Sheeres are made with
twoo Triangells ioyned together
soz to receiue betwen them the saied
battell, made like a wedge oz Tri-
angell. The example wherof I wil
make also w. 100. men, as the Tri-
angell oz wedge was made, so that
therby may be iudged if there were twoo armies of
equal numbers of men, and that the one of them wer
pitched lyke a Triangell, and the other lyke a Shee-
res, which of them should haue the aduantage. Wher
foze myndynge of. 100. men to make the battell cal-
led the Sheeres, they ought to be deuided into twoo
equall partes and of euery one of these partes beyng
50. to make a Triangell accoordinge to the maner a-
boue declared; and to ioygne them together, as here
solowynge apereth in figure with their poinctes to-
wardes the enemies: I meane towardes the wedge,
to receiue it betwen them: And it is to be noted how
in makynge of these twoo Triangells, there shall re-
mayne ouerplus one man of euery one of them out of
the arape, soz that the number of. 50. is no Qua-
drante number, and it is moze then the Quadrante
number contained of the same (whiche is. 49. by a
man onely, so that betwene them bothe, there shal re-
mayne ouerplus twoo menne, as here appereth in
Figure.

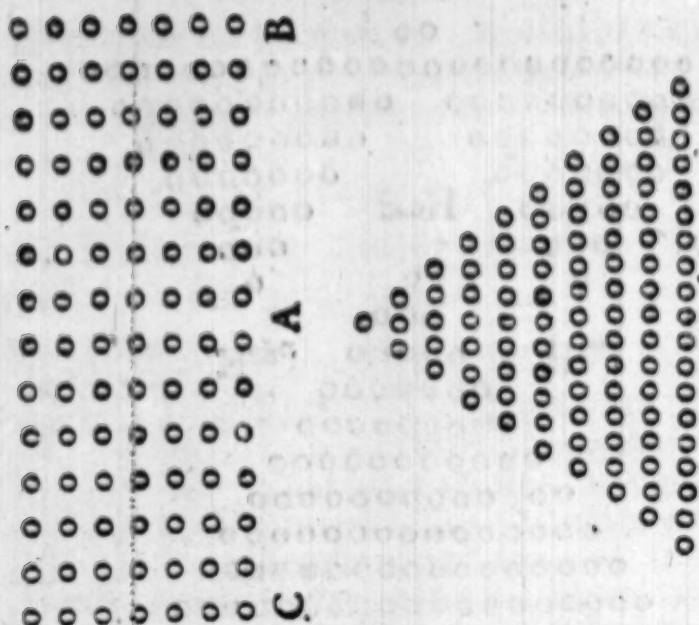


What auantage it is to order men in a Triangell battell against the enemy that knoweth not how to make the battell called the Sheeres to set against it, in especially vwhere there is as many men of the one parte as of the other. Cap. 5.

When the contrarie parte would come against a threesquare battell, with a battell that were sowersquare, as now we a dayes is vsed, by all reason it shalbe broken & ouerthrowne. As admit for example that there be. 100. in a threesquare battell, and a. 100 other men in a sowersquare battell, pitched agaynst the threesquare, as here following appereth in figure.

And

The orderynge of Souldiers



And for that the order of the Triangell in saight-
 yng, is after suche sorte, that all those whiche shote
 with any kynde of weapon, as peeces of Ordnance,
 Harkebuses, Dartes, Bowes, or Crossbowes, ought
 all to directe their shotte, and to strike onely in the
 same place, where the poynce of the Triangell seekes
 to enter, I meane in the poynce A. wherby the men
 that are in the same place, shall either be slaine or els
 constrained to geue place to the poynce of the saied
 Triangell thzoughe the greate multitude of shotte
 strikynge in that place. So that the poynce of the saied
 Triangell enterynge therein, may continually pene-
 trate all the saied array cleane thzough. For as much
 as al the Harkebutters, and Archers which remaine
 without, muste not cease to shote in the very same
 place, and no other where els: whiche thyng doeyng
 it is impossible but that wase shall be geuen for the
 saied Triangell to enter in, and once entred, suche
 an arme is ouerthrowen without any remedie. For
 all the force and strengthe of such a Triangell being
 made

made in that place onely, it is not possible that men in
suche a place may be able to withstand, although there
were many moze in soche Quadrant aray, then those
that be in the saied Triangell; because the place of A
cannot be succored of anye of those of the same battell;
consideryng that if those which are placed towarde
B. or els towarde C. would come to succor the place
where the violence and force is made, it must needs
be, that thei must disorder them selues: and beyng
once disordered, thei run into the very same mischief,
after suche sorte, that thei shall remaine altogether
broken: & remaynyng in their places, their strength
or power, resteth of none effecte: so; as much as none
of them can be abell to doo any thyng, how valiante
soeuer he be. Wherby may be vnderstode of what im-
portance this triangell battell is against the enemye,
that knoweth not the medecin or remedie thereof.

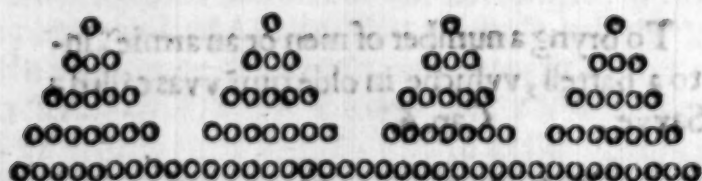
To bryng a number of men or an armie, in-
to a battell, vyhich in olde time vvas called a
Sawve. Cap. 6.



His fashion of battell accordyng
to the qualitee of the name, ought to bee
made as it were with teeth; like vnto a
Sawve which thei vse to saw timber with
all. And therfoze myndyng to bryng a
number of men, or an armie into such a fashion, there
must be considered twoo thinges, the one, how ma-
nie teeth this sawe is to be made of, and whether be-
sides those teeth, there woulde be anye other thinge to
sustaine such teeth or no. As for example, admit that
the men of whom muste be made those onely teeth of
this so;e said Sawve, be. 100. now these 100. menne
ought to be deuised into the number of the teeth that
this Sawve shall haue, and of euerie one of those par-
tes,

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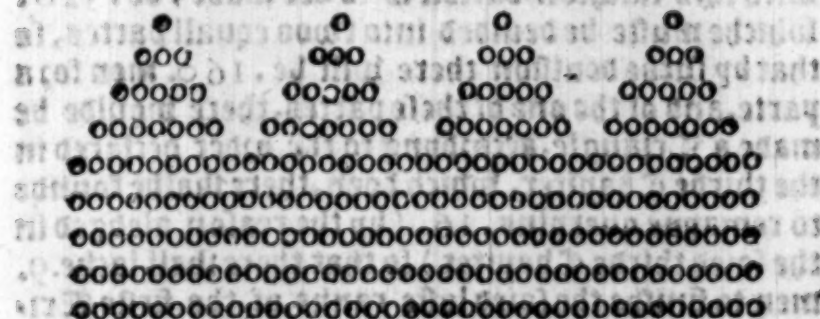
tes, to fashion a Triangell, by the rule declared in the thirde Chapter: and those Triangles to ioigne close together, accoꝝyng as was done of those two that made the wheeres: As putte case that of the saide hundred men there woulde be made sower teeth of a Sawe, then the saide. 100. men must be deuided in to sower partes, in whiche deuissions it will come to 25. for a part. Now of euery one of these partes, ther ought to be fashioned a Triangell, accoꝝyng to the order geuen in the foresaied thirde Chapter. And these. 4. Triangles to ioigne them straight together, as here folowing appereth in figure: and this is in as muche as in makynge the teeth onely: but if peraduenture there woulde be put an other order behinde the saide sower teeth, it is needefull firste to determine of howe manie men such a rate is to be made, and those to take oute by theim selues, and of the reste to make



the teethe, and behinde the saide teethe to plase those number of men which sytts were taken oute, and to ordein them so many men in a ranke, as shall be found directly in lengthe in all the hinder partes of the teeth that are made, as for example, admit there bee 244. men, and that with a hundred men therof, ther muste be made sower teeth of a Sawe, and the other 144. to be made certayne rankes to sustaine the saide sower teeth: Therfore the hundred menne beeynge brought into sower teeth, as aboue is declared, consequently behinde those, there ought to bee placed those. 144. men, 16. men to a ranke: for as muche as in all the sower lower partes of the saide sower teethe there

there be. 36 men, as in the figure next following appereth. And after this maner and order, if there were a hundred thousand men, they might be set in a rase, placing them, as above is done with that little tell number.

Fronte.



To fashion a battell of a number of men or an armie like vnto two Triangles ioyned together, so that they may be apte to marche vwith a corner ther of toward the enemies, Cap. 7.



With the rule whereby the single Triangle is made, with the verie same almost this fashon battell is also made: so, as much as devisyng all those men, or that Armie wherewith this fashon battell is to be made into two equal parties, and of the one halfe therof to make a Triangell and that doeth, upon the verie last syde of the same, there ought to be placed the other halfe number of men in rases, which continually goe decreasing by twoo men lesse, I mean cleane contrarie to that was doen at the beginnyng with one, where beginnyng to make the poince of the Triangell, the ranks were continually increased with twoo men more. But it is to be vnderstand, that if in making the firste Triangell, there happere

The orderynge of Souldiers

to remaine ouerplus any men, that are not sufficient
to make vp an other ranke, yet the verie same ranke
ought to be finished vp with some of the other halfe
number of men, so; that one of these twoo Trian-
gels ioined together, cometh to be of one ranke moze
then the other. As for example, admit the men, wher-
with this fasshion battell is to bee made, be. 320.
whiche muste be deuised into twoo equall partes, so
that by suche deuision there will be. 160. men for a
parte, and of the one of these partes, there woulde be
made a Triangle, acco;dyng to the order declared in
the thirde Chapter, which doen, there shalbe founde
to remaine ouerplus. 16. (by the reason aledged in
the saied thirde Chapter) so that there shall lacke. 9.
men to finishe the saied laste ranke of the first Tri-
angell: Therfoze the saied ranke must be made vp,
with the men of the other halfe, as takynge those. 19.
men which lackes, so that in the saied first Triangel
may be. 169. men, and in the other parte only, 151.
men, wherwith the other Triangel ought to be made
vpon the laste ranke of the fyfste, whiche laste ranke
shall be of. 25. men: wherfoze vpon the same, there
must be placed an other ranke of two men lesse, that
is. 23. and vpon the same saied. 23. men, to place an o-
ther of. 21. men, and vpon the. 21. men, to place an
other of. 19. men, and vpon those. 19. men, to place
an other of. 17. men, and so to procede alwaies with
twoo men lesse, til such time as it cometh to the ranke
of one man onely, as here solotopnge appereth in fi-
gure: Now it is, that there shall be founde in the
ende, to remaine ouerplus. 7. men, the whiche the
Sergiant may place where he shall thinke good. And
thus with this maner of order, there may be brought
into like araye, any armie how great so euer it be, &
they may turne them selues, and in marching, make
of the Rerewarde, the Forwarde, and likewise of
what so euer spde thei like.

Front

The orderynge of Souldiers

VVhat is best to be doen vvhether the ordinance
of the enemies beyng shotte into the Armie hath
slayne many men, Cap. 8.



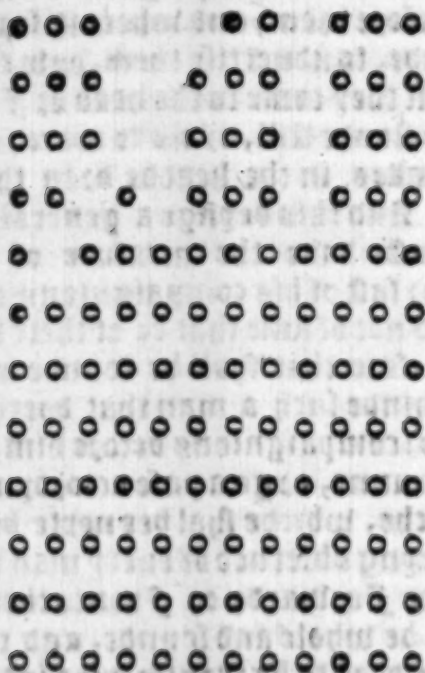
An armie of men that hapneth to
haue certayne ranks therof to be stricken
downe and kilde with the enemies ordi-
nance, and marchynge after suche sorte,
leauynge beynde the places of those menne
which are slaine with the Artillerie, or els drawynge
them selues close together, to fill such empty places,
the one of these waies is very euill, & the other much
woyse: so; as much as leauynge those places after such
sorte open, inespacially in the Forwarde, there is ge-
nen therby great facilitie vnto the enemies to enter
into the saied rales, and to ouerthrowe them: And
likewise causynge after such misfortune the saied rales
to drawe together, to fill the saied places, those rales
muste needes altogether be disordered, and shall bee
brought almost into confusion: so; yf it is to be thought
that the saied artillerie, doeth not destroye any ranke
of men wholly from one ende to another in length,
but only a parte of some, and a parte of other, & some
to remaine vntouched, or unhurt. In whiche case
beyng minded to cause the to draw together, to fill by
the saied voided places, it muste needes followe that the
whole ranke do disorder in lengthing those that lacke
so that some of the ranks shall remaine with a grea-
ter number of ranks of men (in length) in the Rere-
warde, then in the Forwarde, wherby if suche a bat-
tell woulde marche, of necessitye it will immediatlye
runne into confusion, because of those ranks that ar
vnprefect in length. Wherfore that Capitaine, is to
be praysed, whiche instructeth his menne that in lyke
chaunces, they neuer remaine without a compaigni-
on before them, excepte it be in the Fronte, as to ad-
uertise

nertise euery one of them, that if it soztune to happen
 anie of them to lacke y same man, which was wonte
 to marche befoze them, o: els mo, that then inconti-
 nente, and with seleretie they doo marche sozwarde,
 vntill thei finde an other compaignion in the accusto-
 med distance befoze them, and where it soztuneth no
 man to be founde, to aduertise them, how thei should
 then p:ocede till they come to the head o: Fronte and
 in such place to stande still, o: els to march acco:ding
 as the other rankes in the headdo: in the Fronte
 shall doo. And this beyng a generall rule that
 euery man muste take the measure of his mar-
 ching softely o: fast of his compaignions that goeth
 befoze him, and not of anie that be of their sides. All
 those men therefore that shall be founde in the verie
 same ranke behinde such a man that doeth lacke his
 compaignion o: compaignions befoze him, shall bee
 constrained to runne, o: go a p:ase acco:pyng as that
 man shall marche, whiche shal bee nerte befoze him:
 which thing beyng obserued of euery man in the bat-
 tell, alwaies the Fozwarde o: Fronte thereof, shall
 come therby to be whole and sounde, and those emp-
 tie places of the dead to be transfo:med into the Here-
 warde, in whiche places there shall not almost be any
 perill. As so: example, admitte, that in a battel of
 144. men in fashion sowersquare, the enemies hath
 slayne. 12. men, as by the voyde places in the figure
 folowynge appereth, I say that hauyng aduertised e-
 uery man to doo as much as befoze I haue declared,
 which is, that euery time that he lacketh his felow(o:
 moe men) that marched befoze him, he doo straight-
 way make haste, and with all speede possible not to
 cease goyng sozwarde, til he finde an other compaign-
 ion

The orderynge of Souldiers

in the accustomed distance that goeth before him.

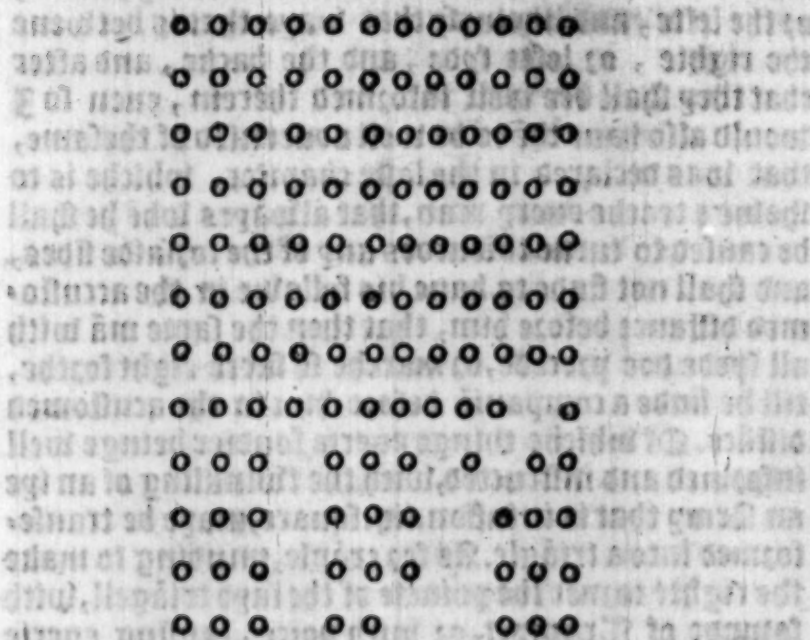
Fronte



And if it fortune in suche a ranke that in the ende be
 finde no man, yet he ought to procede so muche till he
 come to the last ranke in the ffronte, & there to stande
 still, or els to marche accordynge to the order of the
 sated ranke. And lyke wyse every man ought to take
 heed that in his marchynge falle or softlye, he doe
 rule him selfe by his compaignion that goeth before
 him, & not of any of those that be on his sides: whiche
 thyng

thing being obserued, as in the figured rayes aboue

Fronte.



Written, the same battelles, shall bee transformed in
this other maner, like vnto the laste figure, that is,
those. 12. boide places shalbe translated into the re-
rewarde, as plainly maie be seen.

Howe to change vvith speede an Army, that is, in
battell raie fowversquare, into a triangell fation, vvith-
out disordering the firster rankes, and vvithout petrill
of confusion. Cap. 19.

D Like



Like as the Captain with sound of the trompete, or with voice shall cause the souldiers to bee aduertised and taughte to knowe how to turne that waie, which is betwene the fronte and the righte side, or the leste, and likewise that waie that is betwene the righte, or leste syde, and the backe, and after that they shall bee well infozmed therein, euen so I would also haue the to be well aduertised of thesame, that was declared in the laste chapter, whiche is to helpe & teache euery man, that alwayes whē he shall be caused to turne towarde any of the foresaide sides, and shall not finde to haue his fellowe in the accustomed distance befoze him, that then the same mā with all speede doe procede, or marche so farre right sozthe, till he finde a companiō befoze him in the accustomed distāce. Of whiche thinge euerye souldier beinge well infozmed and instructed, with the twinkling of an eye an Army that is in fassion. iij. square, maye be transefozmed into a triāgle. As soz exāple, minding to make the righte cozner the poincte of the sayd triāgell, with sounde of Trompet, or with voice, causing euerye man in the army to tourne them selues with their faces that waie, whiche is betwene the fronte and the righte flank, and incontinente, so sone as they are turned, euerye mā obseruinge the foresaide order, that is, that all those, whiche shall perceiue not to haue his fellowe befoze him in the accustomed distance, doe procede streight sozthe untill he haue one, whiche doeth the saied sowersquare fassion, shall be founde to bee changed into a triāgell fassion, and the poinct of the saue triāgell figure, shall come to bee the right cozner of the fronte of the firste figure. Whiche thing, is as easie to be doen as is possible: soz the triall whereof, let there be soz example. 25. men standing in fassion sower square, as hereafter appereth in figure, and to cause

cause it to be better vnderstand, I haue thought good to make this figure with 25. letters of the a b c. Now myndyng to chaunge this sower square figure, into a triagell figure, it is nedeful to cause them all to turne

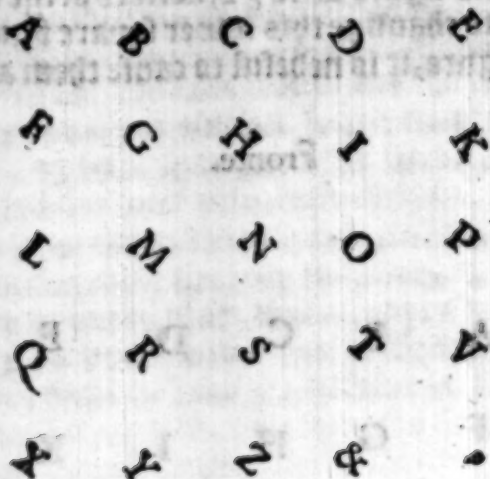
Fronte.

A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
X	Y	Z	&	

with their faces that wale, which is betwen the hed & the same side, where I haue thought good to make the point of the wedge or triagle: as for example purposing to make the corner. E. the point & hed of the triagle, I shall cause that every man doe tourne with his face that wale, betwene the front & the right rancke, towarde the corner. E. whiche thinge doen, the sower square figure shall cum to stande as here apereth: in whiche figure maye be seen manie men, that hath no felow in the custome distace befoze him, although they haue a felowe straighte befoze him, muche moze far

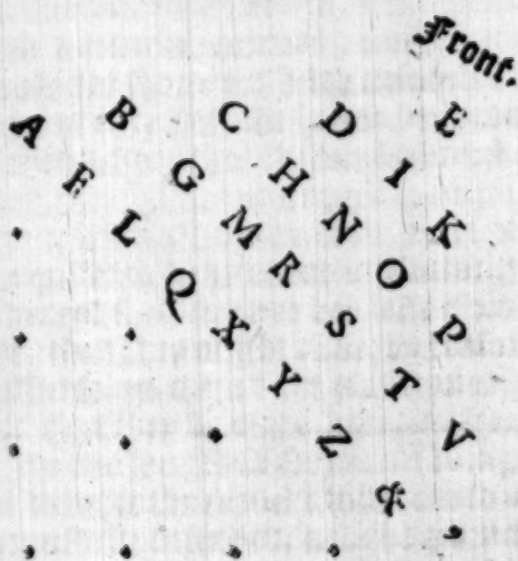
D y ther

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ther of then the ordinary, whiche is double so muche as the ordinary, as appereth by . F. who hath righte befoze him. B. but the distaunce that is betwene the saied. F. and the saied. B. is double so muche as the ordinary distaunce, wherfoze if. F. shall observe the preceptes aboue declared, immediatly so sone as he shall haue turned his face that wale, he should incontinent goe, to come nerer to the saied. B. in the accustomed distaunce, which doyng, he shall bring himself betwene A. and. G. Albeit the saied. G. shall not remain in his firste place, but shall go nerer vnto. C. to the accustomed distaunce, and in the place where. G. was firste L. muste come. So that. F. shall stande betwene. A. and. L. and likewise if all the other shall procede forwarde, accordyng to the saied order, vntill every man finde a felowe in the accustomed distaunce befoze him. H. shall goe nerer vnto. D. and. M. shall folloze the saide. H. and. Q. shall folloze after the saied. M. every one of theim, vntill they come to their accustomed distaunce

saunce. And in like manner. I. shall goe nerer vnto. E.
and. N. shall folowe. I. and. R. shall folowe. N. and. X.
shall folowe the saide. R. every one of them vntill thei
come to their accustomed distaunce. Likewise. O. shall
goe nerer to. K. and. S. shall folowe. O. and. Y. shall fo-
lowe. S. also to the ordinary distance: and likewise. &.
shall also goe nerer to. V. to the accustomed distaunce,
whiche thing beyng obserued, suche a sower square
battell shall be transformed into a triangle battell, as
here folowing appereth in figure, the point whereof
shall come to bee the corner. E. & with this order a Ca-
pitaine maye change an armie, with tournyng of a
bande, though it wer of. 100000. men from the fasion
of a sower square to the fasion of threesquare. So that



the saide men be aduertised and taught, as also hath
been declared, bothe as wel to knowe how thei ought

21. 107 The orderinge of Souldiers.

to turne as to marche. Whiche is of wonderfull im-
portance: for as muche, as at a sudden to rebuse an
army after this sorte into a triangell fation, it is al-
moste impossibell that the enemies shalbe abell, or
shall knowe howe to make theyr army like the Sbe-
res to set againste it, wherby shall cum great aduun-
tage as by the. 5. chapter above is plainelie proued:
for that it semes vnto me that a triangle battel, maie
bee allwaye sufficiente able to bzeake all maner of so-
wersquare battelles as is vsed now a daies, although
it had half so manie me menne, so longe as those
of the triangell battell be wel instruc-
ted of the manner of theyr saigh-
tinge declared in the 5. chapter.

Of

Of the perfecte forme or fation of
stronge places.



The forme whiche vnto
the circular satio doeth moſte
reſemble, of experte and ſkil-
ful ſoldiers, is aboue al other
with moſte reaſon praized, ſo
that the Curtine or walles
thereof, be made ſtraight, & of
ſuche length, that of the bul-
warkes they maye be flank-
ked: whiche ſation beinge made with manie cozn-
ers, is verie meete and neceſſarie if in a ſufficient greate
place it be erected: ſoꝝ where in ſmall romes the iuſte
lengthe of the curtyn is ſhoꝛtened, it is conueniente
to builde theſm with ſelwe cozn-
ers, becauſe if other-
wyſe they ſhould bee ſhoꝛtened with a number of cozn-
ers, the ſhoꝛter of neceſſitie the ſpaces betwene thoſe
muſte bee, ſo that beſides that the one bulwarke maie
hurte the other, thei ſhalbee moꝛeouer to no purpoſe,
but rather an occaſion of infinite coſte, theiꝝ curtines
needing as is requiſet to be defended of platfoꝛmes and
the cozn-
ers thereof ſhall come to bee leſſe blun-
te, and
much ſharper then they ought to be, by reaſon of the
little diſtance betwene them & the platfoꝛmes. Ther-
foꝛe the moꝛe that they be made diſtante from thoſe
bulwarkes (the due length of the curtyn being kepte)
ſo muche the blunter the cozn-
ers will cum to be, whi-
che by them muſte be defended, and the moꝛe of thoſe
cozn-
ers that there are in the ſame faſſon, ſo muche
the blunter they ſhall alſo come to be. So that where
the ſation of the places that are builde be ſufficiente
greate to containe all the ſoꝛſaide particulars, whiche
foꝛ a ſure foꝛtreſſe is requiſett to be made, all thinge
commodiouſly will cum to paſſe: and the greater that
they

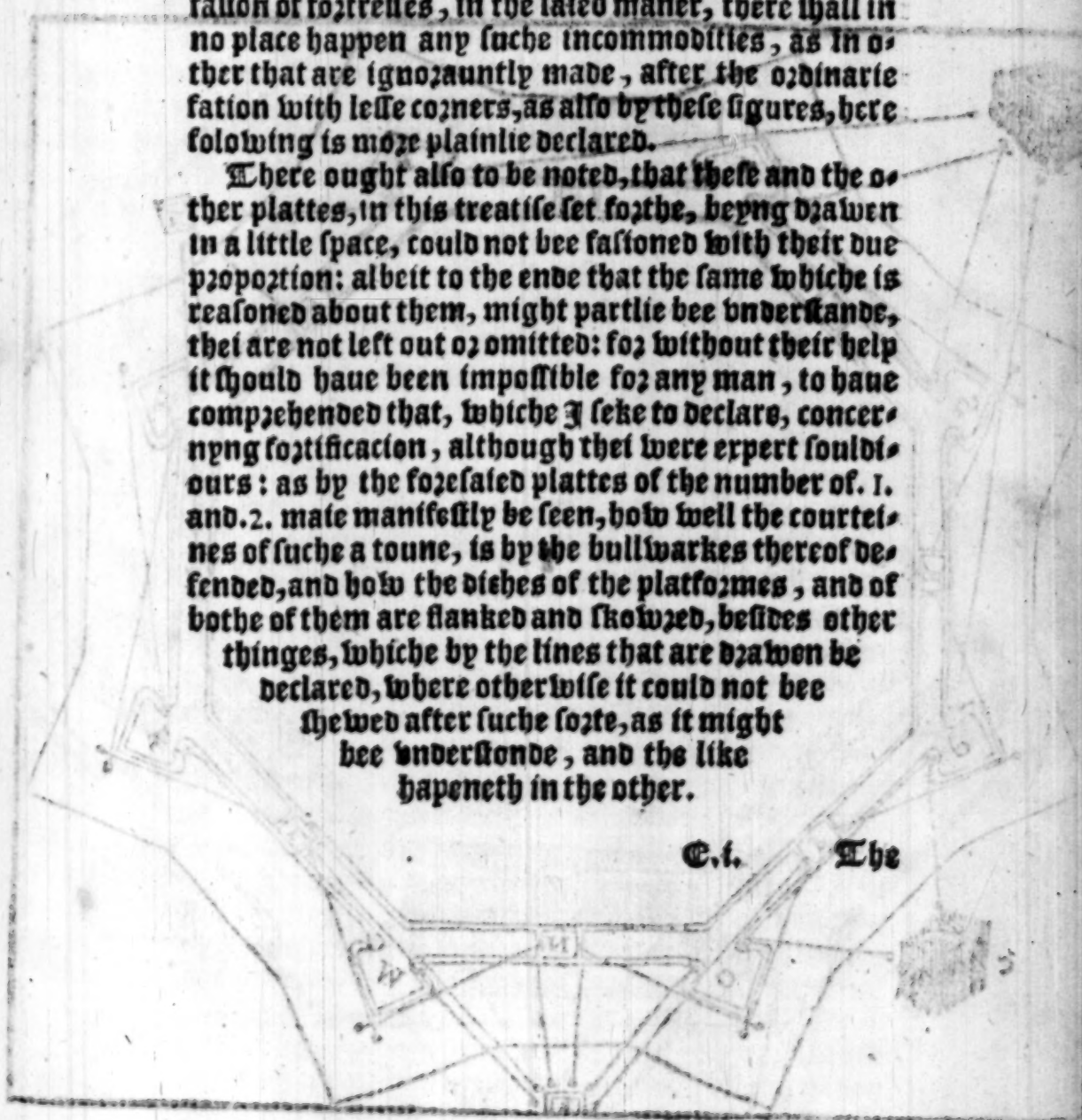
thei shalbe, the moze men thei make haue to defend the
 and moze comodious space within, for to retire with
 great and strong fortification, & the platfozmes maye
 be made muche further in, & haue the corners of their
 bulwarke blunt, and with a large back, mete for de-
 fence, and in an assault, muche surer then the sharpe,
 bicause the sharpe pointed bulwarke, being battered
 defendeth the nemie from the platfozmes, so that vn-
 der thesame, beyng couered, he make almoste out of
 daunger, make an assault. ¶ Here against a towne or
 fortresse, that wer built after the ratio of these plattes
 folowynge, in what so ever part of soche places, the e-
 nemie should approche marchyng towarde them to
 incampe, or in battell rate to assaile the, or with tren-
 ches, and artillery to batter them, either high or lowe
 or by the curtin within, or otherwise, he shall alwaies
 fro many of those flankers of thesame place, be greatly
 hurt and repulced, and of the platfozmes in espettally,
 moze then from any other where, bicause thei be most
 nere, and stande higher then all the other, and they
 shall also hurte hym moze, when he shall bee some-
 what farre of, then nere hand, as maye be seen by the
 plaine platte that hath the number. 1. and in the same
 that is raised vp, that hath the number. 2. The which
 with thoo other are also here after pictured, to the
 ende that thereby maye be considered of suche as shall
 see them, the sundrie good and notable effectes that
 bee in them, the whiche although it bee not possible
 so easely with wrytinge to bee expessed, yet by their
 helpe thei maye be better vnderstand and comprehen-
 ded, and moreover by them shalbe gotten this know-
 ledge, wherby every man commodiously maye vnder-
 stande, where the enemye govinge aboute with his
 power, maye best deuise to assaile them, and how they
 within maye prouide to defende and withstande the
 same with their men, taking them from those places
 where

where thei maie beste be spared, so that building the fasson of fortresses, in the sated maner, there shall in no place happen any suche incommodities, as in other that are ignozauntly made, after the ordinarie fation with lesse coznors, as also by these figures, here folowing is moze plainlie declared.

There ought also to be noted, that these and the other plattes, in this treatise set forth, beyng drawen in a little space, could not bee fastoned with their due proportion: albeit to the ende that the same whiche is reasoned about them, might partlie bee vnderstande, thei are not left out or omitted: for without their help it should haue been impossible for any man, to haue comprehended that, whiche I seke to declare, concerning fortificacion, although thei were expert souldiours: as by the foresaid plattes of the number of. 1. and. 2. maie manifestly be seen, how well the courtesnes of suche a towne, is by the bullwarkes thereof defended, and how the ditches of the platfozmes, and of bothe of them are flanked and skowzed, besides other thinges, whiche by the lines that are drawen be declared, where otherwise it could not bee shewed after suche sorte, as it might bee vnderstande, and the like hapeneth in the other.

C. 1.

The



infect that waste be spent, to that improving the
 of the water, in the manner, that shall be

no plan of the water, in the manner, that shall be
 of the water, in the manner, that shall be

of the water, in the manner, that shall be
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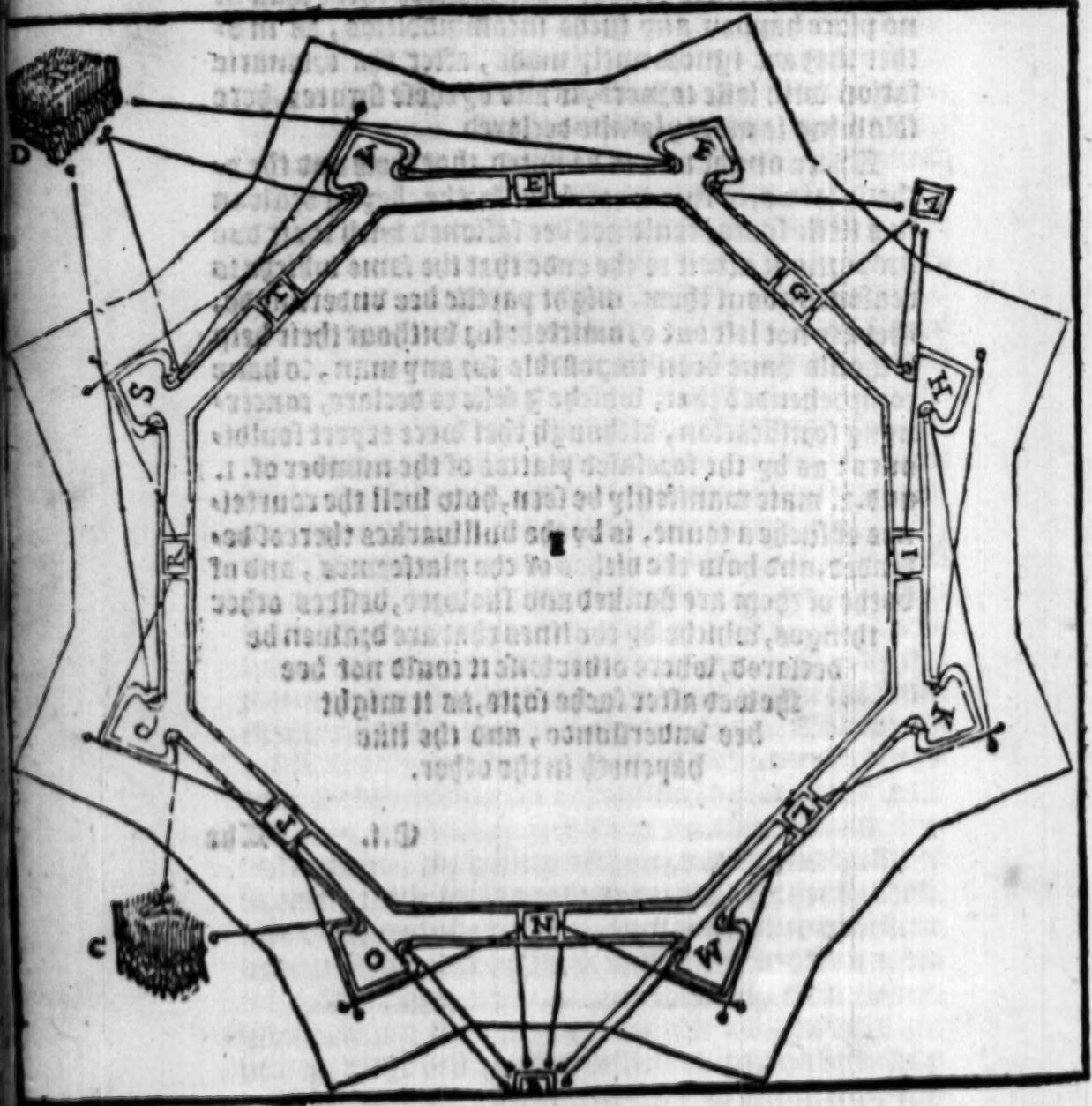
of the water, in the manner, that shall be
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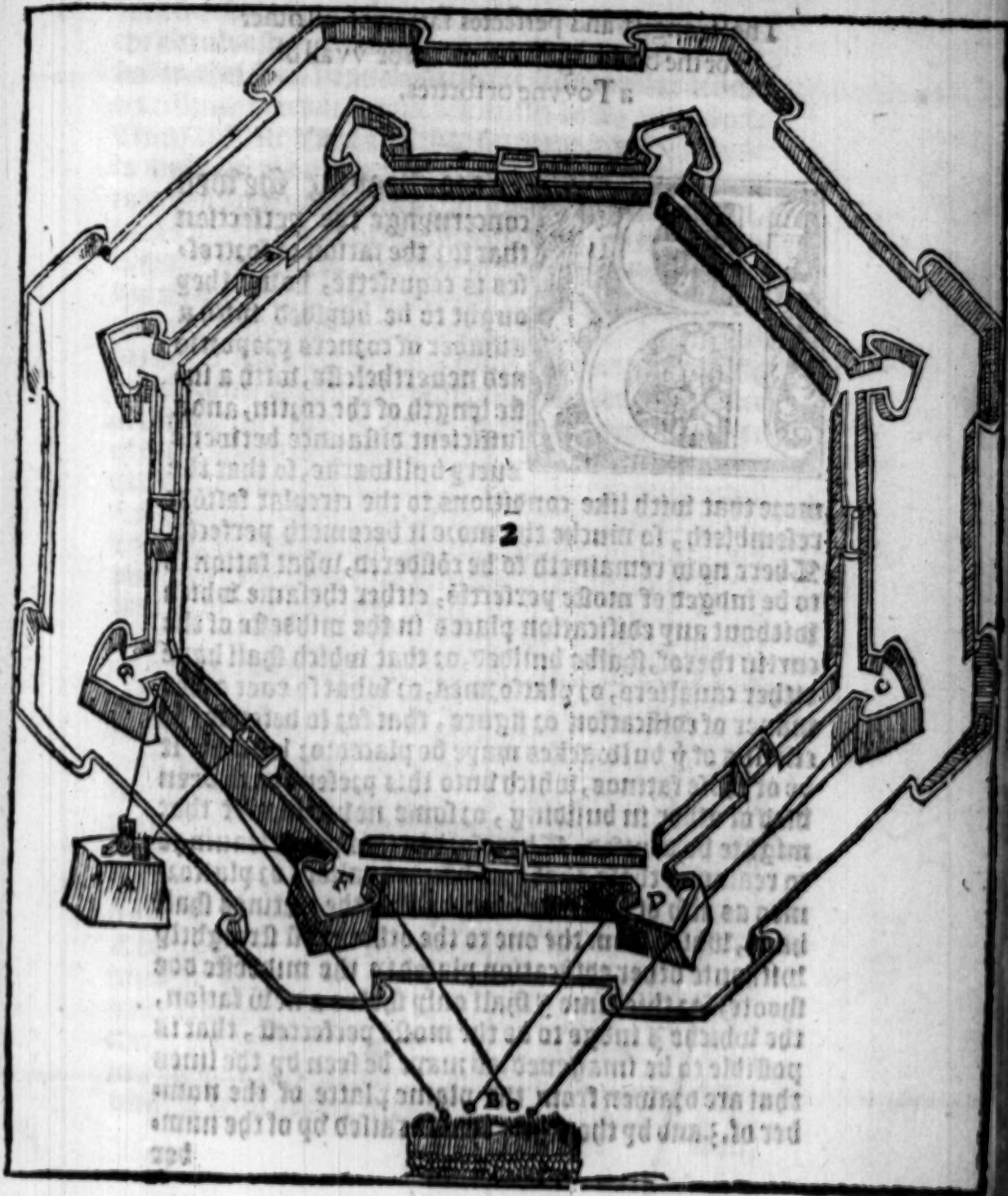
of the water, in the manner, that shall be
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The strongest and perfectest sation of all other
for the building of the cortin or vvall of
a Towne or fortres.



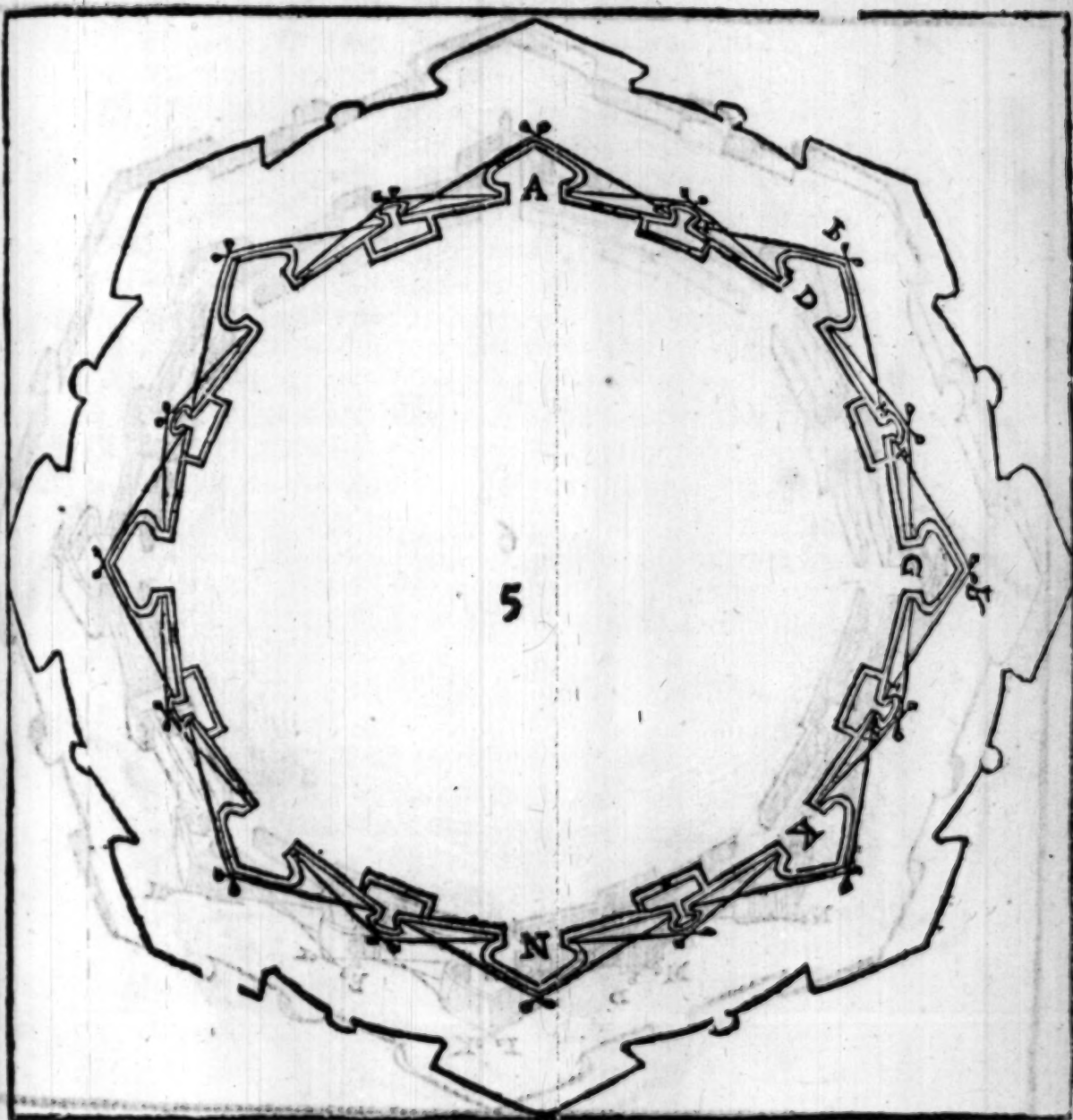
Before beeyng shewed
concernynge the perfection
that for the sation of fortres-
ses is requissette, howe they
ought to be buylded with a
number of cojners propoztio-
ned neuerthelesse, with a su-
ffle length of the cortin, and a
sufficient distannce betwene
every bullwarke, so that the

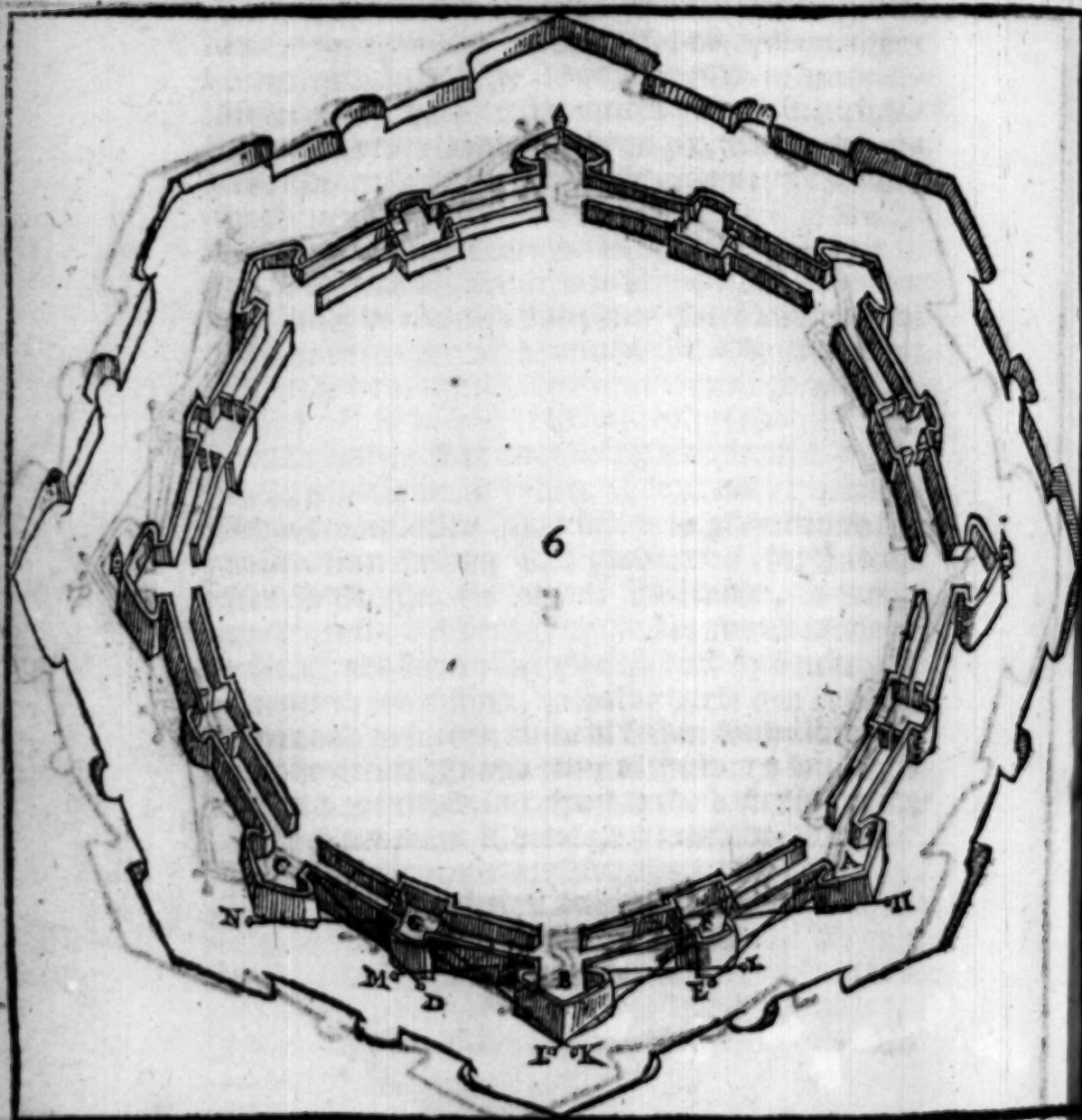
moze that with like condicions to the circular satio it
resembleth, so muche the moze it becometh perfecte.
There now remaineth to be considered, what sation is
to be iudged of moste perfectio, either the same which
without any edification placed in the middesse of the
cortin therof, shalbe builded, or that which shall haue
either canallers, or platfoymes, or what so euer other
maner of edification or figure, that for to defende the
cortins of y bullwarke maye be placed: or whether it
be of those satins, which vnto this present hath been
used of other in building, or some newe maner that
mighte be deuised. Therefore in this parte leauinge
to reason of those, that shal haue canallers or platfoy-
mes as also of those bullwarke that the cortines shall
haue, which from the one to the other most straightly
withoute other edification placed in the middesse doe
shoote, for this time I shall only shewe a new sation,
the whiche I iudge to be the moste perfectest, that is
possible to be imagened, as maye be seen by the lines
that are drawen from the plaine platte of the num-
ber of 3. and by the platte that is raised bp of the num-
ber

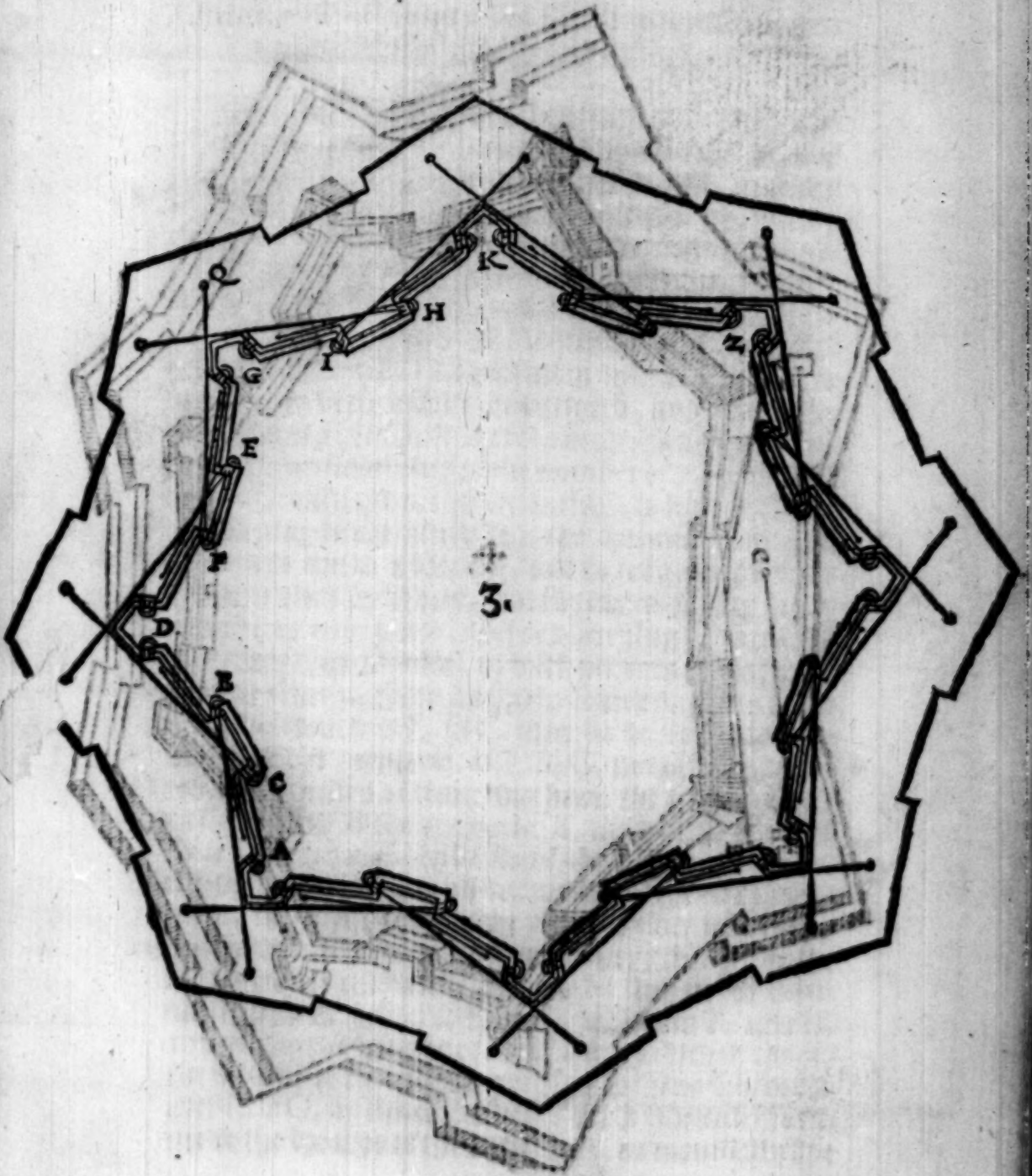
ber of. 4. here vnder figured, which resembling so nere
the circular figure, as the due length of the curtin wil
suffer, they shall haue this difference fro the other which
directly are distended, that the curtin being made back
a conueniente distance, that space maye be leste mete
to make fro the one and the other poyncte of the same
retire, a flanker, as twoo like flankers maye be seen,
in the plaine platte of the number of. 3. by the letters
E. and. F. and in the plat that is raised vp of the num-
ber of. 4. by the letters. A. and. C. they shall haue co-
moditie to directe theire ordinaunce to flanke, as wel
highe as lowe, like vnto those that are commonly
builde nowe adales: whereby, not only the same space
of the curtin, that is betwene the one and the other
of them shalbe perfectly defended, as maye be percei-
ued by the platte of the number of. 3. by the line drawe
from the letter. E. to the letter. F. but also that whiche
lieth betwene them and the bullwarke, as in the said
platte, by the lines that describeth the manner of the
shotte the one from the letter. E. to the letter. S. the
other from the letter. F. to the letter. R. maye be vn-
derstande, and likewise the certainties of those bul-
warke, as also in the verie same, by the line that is
drawne from the letter. F. to the letter. Q. is shewed,
with a better maner than in other fashion of building
that is vsed can be defended, so that all the partes of
them shall not only be made to be able to shoote by
flanke, but also thereby to shoote by righte line, as in
the platte of the number of. 4. by the line that passeth
from the letter. C. to the letter. D. and from the letter
A. to the letter. B. maye be perceiued. And whereas they
maye be builded with lesse cost then otherwyse, they
haue also commoditie to make their gates equally di-
stante the one from the other, from the nexte bulwar-
kes: where they are placed moste safesse and commo-
diouslie with greate strengthe, and those gates be as
C. ity. well,

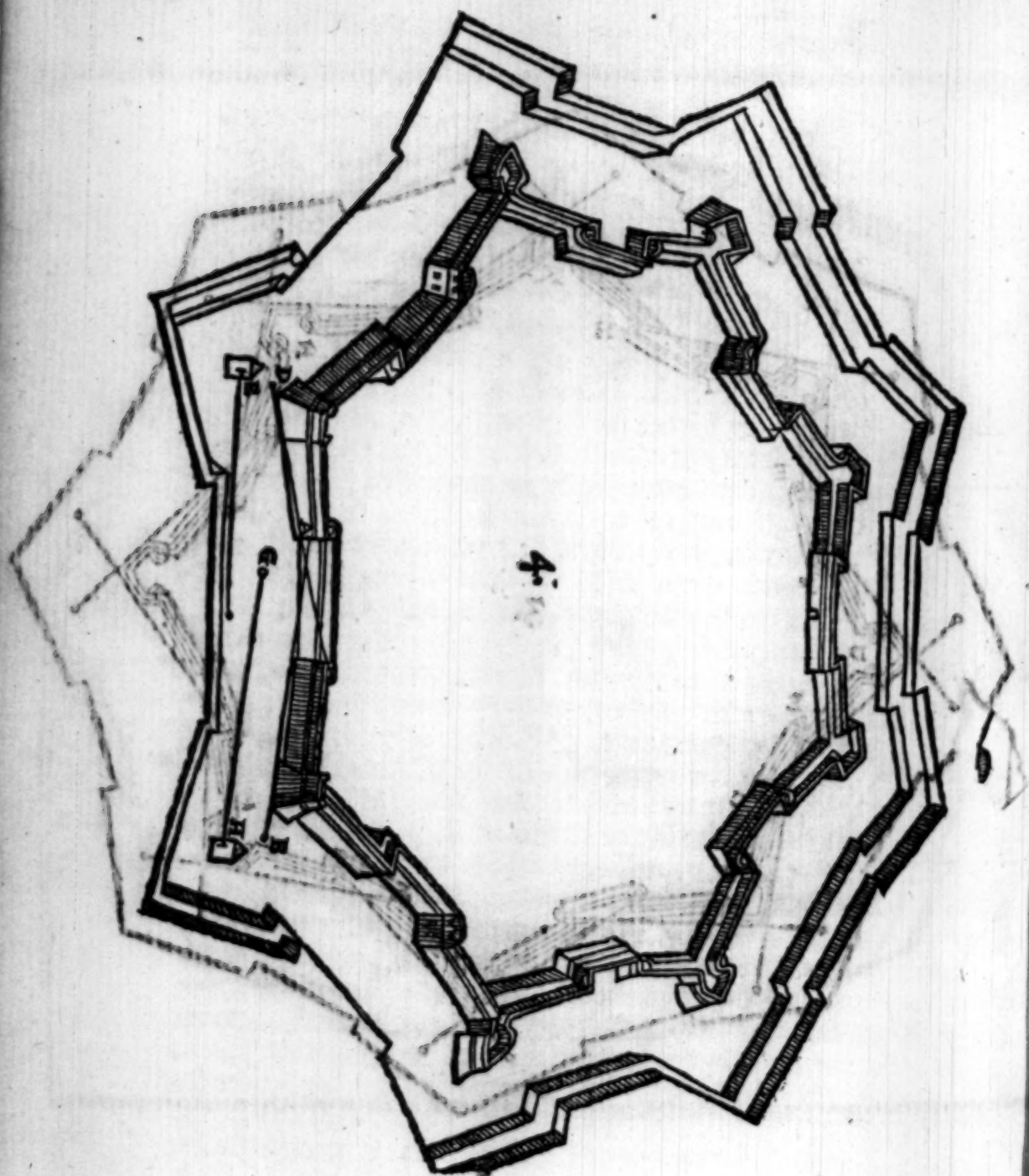
well, as all the rest of the wall, and greater in that parte, muche surer from the assailing of the enemies, then in what so ever other maner of sation mighte be deuised: for as muche as the platfoymes, and canalliers bee nothyng so stronge, but moze easie to bee ouerthrowen, in respecte to this maner of buildinge, whiche is mooste sure from suche daunger, and exceedingly wel defended from the force of the enemye: to the whiche, the nerer that the enemye shall apwoche, so muche the moze he shall of those within be hurte, contrary to that, whiche in the platfoymes happeneth. Moreover there maie be certaine slaughter houses builde in the dicke, as in the plat of the number of. 4. by the letters E. H. is shewed, whiche the enemies with greate difficultie muste firste seke to winne, befoze thei can come nere the walles. And those being wonne, shall be but small prejudice to the towne or fortresse: wherefoze without comparison, this sation is greater to bee praised, then the same with platfoymes, so that the nerer the Wall, the enemye shall come, so moche moze from the bulwarkes by flanke, and all mooste on the backe, and from other places, both by flanke, and by fronte in one instant, he shalbe hurte and stricken. Where also in such a kinde of sation with many corners, the greatnesse androme of the towne within, is somewhat deminished, in respect to those that are made with platfoymes. Therefore I conclude, for the considerations aforesaid, these to bee the mooste perfectest sations that any strong fortresse, is possible to bee made,

An









An example of the quadrant forme to proue that it
causeth debilitie and vweaknes. Cap. xxii.



The townes and fortres-
ses that are buylded after a
fowr cornered ratio, in what
so ever maner they be made,
are subiecte to mosse great in-
conueniēces: for that the shar-
pe corners of their bulwar-
kes which of necessity the sa-
me fashion will cause them to

haue, may verie easelie be battered, and vnder the
rupn therof, the assaultes of the enemies defended, as
in the platte following of the number of 7. by the bull-
warke C. battered of the artillerie D. is seen. Wher-
by also may be perceined how the ordinaunce may be
planted to make a breache, and to take awaye their
flankers after such sorte, that the enemies may safely
approche to enie place, eyther marching in battelray
to incampe, or assaulte, or with planers to worke, or
for enie other purpose, as by the fower flankers of the
thre bullwarke. L. E. C. may be vnderstande, the
which of the artillerie. H. F. K. G. not only are batte-
red, but also two of them that haue the letters. L. C.
as is seē, may of the artillerie. K. G. be beate througħ
their flankers, and the backe of the bullwarke. E. ne-
rest to them, which is on bothe sides of the flākes bat-
tered, the which for hauing in suche place lesse thick-
nes the enie wher els, and greate heygth, may be the
more easelie rupnated, as is to be seen in the sayde
bullwarke E. battered with the artillerie F. and H.
and also by the breache of the batterie, which in the cor-
tin is made of the ordinaunce B. as is seene where the
artillerie G. by the cortin doeth beate througħ the sa-
me in the breache of the batterie A. as manifestly ap-
peareth;

Plattes

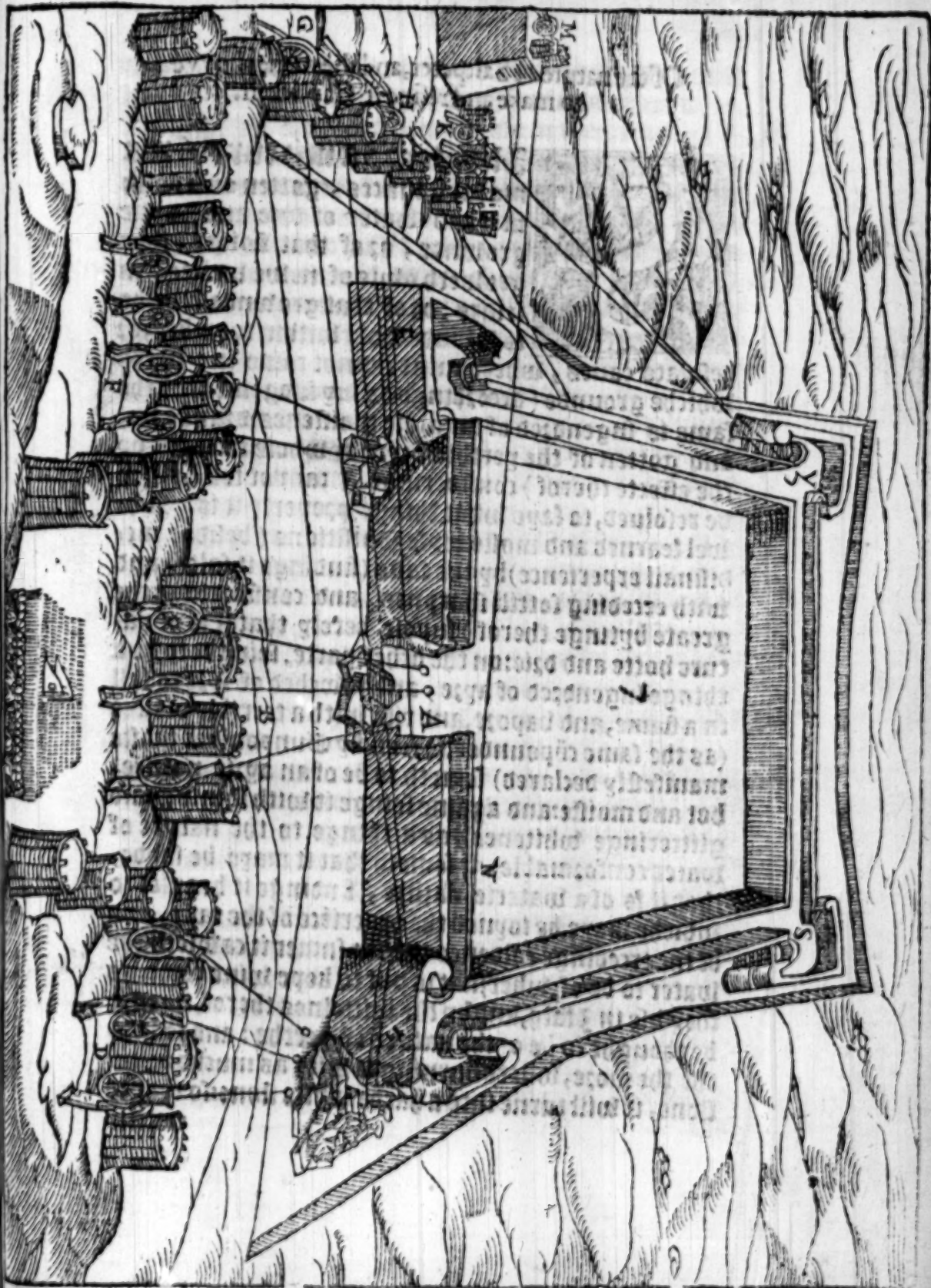
reth: and mozeouer when they withín wolde doe any thing, they shalbe beaten with the artillerie ouer the wall withín the coztin N. from the caualier M. withoute, so that no man shalbe able to stande bebynd the same to defende. And not only in this sozte, but in sundrie wyse, and in diuerse maners, what so eber towne or fortreffe is builded after such fation, may easelie be battered and sune made sautable, whereby withoute further declaration it is plainlie to be vnder-

stande, how muche the foresayde plat-

tes of the other fation ex-

cel this.

De



Of the nature of Saltpeter, and the maner howve
to make and refine it. Cap. xxiii.



Saltpeter is a mixture of ma
nie substances; gotten oute with
fire and water of dyie and durtie
grownde, or of that flower, that
groweth oute of newe walles, in
selars, or of that grownde whiche
is sownde loose within toombes, or
desolate caues, where raine cannot come in: in the
whiche grounde (accoordinge to my iudgemente) the
same is ingendred of an ayrie moistenes drunke by,
and gotten of the yerthe dynes: whose nature (by
the effecte therof) consideringe, I cannot tell how to
be resolved, to saye what thinge properly it is. The
wel learned and moste wyse Philosophers (besides me,
disinall experience) by the taste (findinge it salte, and
with exceeding sottill sharpnes, and consideringe the
greate bytinge therof) suppose verely that it is of na
ture hotte and dyie: on the other parte, seing it to be a
thinge ingendred of ayre, and touched of fyre to fall
in a flame, and vapoze, and rise with a terrible violēce
(as the same compounded, is seen by Gunpoulder moste
manifestly declared) semeth to be of an ayrie nature,
hot and moiste: and againe seinge it with shining and
glitteringe whitenes, as a thinge to the nature of
water confozmable, it semeth that it maye be sayde,
that it is of a waterie nature, findinge it beaue: to
whiche maye be soynded the experiece of the taste, and
of the exceeding coldenes that in summer it causeth the
water to be of, wherein it is put to kepe wine colde, as
they vse in Italy, and by the byttelnes therof, it maye
be thought to be of the nature of yerthe: and so mu
che the moze, where burning it with as muche bym
stone, it will turne into a harde white stone: so that to
conclu.

conclude, it seemeth that it hath the soveraintie & qualitie of euerie elemente. Nowe this of aunciente wryters, was called Nitro: and Plinie in his naturall historie in the. xxi. booke sayeth, that it differeth not muche from salte: whose nature seemes also that vnto Phisitions hath not ben hyd: and it is founde in manie places, but the best is founde in Macedonia: Albeit the late wryters, specially they of our partes, say that Plinie, & other wryters beleued that it was minerale: & peradventure they are deceyued: so that there is of the artificiall, which hath the very same vertue, & as some thinke, moze stronger of nature: & is soude so that the very same medicinall effect, better then the naturall. Nowe this (as I haue sayde) is drawen forth from the sayde durtie pearthe, so that the pearthe dyues by raine hath not ben extincte: but the moste excellenteste of all other, is made of the dunge of beastes, converted into perthe, in stables or in dungbills, of long time not vsed: and aboue all other, of the same that cumeth of hogges, the moste and best is gotten: what so euer dunge it be of, it is requiset that by continuance of time it be well resolved into perthe, and the humiditye therof dried: yea and it is nedefull that the same perthe be as it wer dustie. To mynde to haue a waye to knowe whether it be good, by the taste of the tong it maye be felte if it be bytinge, and howe muche: and findinge it strong, so that you determin to worke of it (making a great quantitie) it is necessarie to provide manie Cauldrons, fornaces, barrills or tubbes: and likewise wood, white lime, and ashes of olde oke: but chiefe muste be provided a great barne, or other walled house nere to the water (wherof it is nedefull to haue inoughe, as also of perthe, both commonious for the place, & likewise euery other thing.) But firste the fornaces muste be made for the caldrons, and they muste be placed thereon, as those be that

that the diers be: then ther must be prepared toysses
 as longe as the howse, & so byzodde, that comodiuslie
 aboue grounde maye stande buttes with their heddes
 knocked oute, square chestes, barreles or tubbes to the
 number of .50. or .60. or .100. (acordinge to the caul-
 derns, and the capacetie of the place) and betwene
 euerie two of those vessels, there muste be set a halfe
 tubbe to receiue the water that shal run oute: or there
 wolde be placed a channell of wood that maye goe
 alonge vnder the holes of the vessels that ar set aboue
 grounde, so that it maye conuey al the water that
 commieth from them, into a great tubbe or two suffi-
 ciente to holde all the water full of substance of sal
 tepeter: and the buttes that haue theire heddes knock-
 ed oute, or barreles or tubbes, in the bottom of eue-
 rie of them there muste be made a hole on the one
 syde, with an Awgar, or els thre or fouer litle
 holes made with a good bigge perser: and vpon them
 muste be layd a litle thynne linnen clothe or els the
 ende of a byome, or sum strawe, to the intente that it
 maye kepe the perthe vp and straine the water that
 shalbe put amongeste the same perthe whiche is to be
 wroughte, when it is tasted with the mouthe so that it
 be certaine, that it containeth Saltepeter. Then there
 muste be made thereof, in the myddest of the holes
 where it is to be wroughte, a great bill, nexte vnto
 which muste be made an other halfe so bigge, which
 must be made with twoo partes of onstaked lime, and
 thre of oke ashes, or other ashes, whiche in taste ar
 verie stronge & sharpe: and then the one bill muste be
 well mingled with the other, and with the same com-
 position, the tubbes muste be filled that ar set alofte
 vpon the toysses, within a span of the mowthe, or else
 (minding not to mingel with the perath the ashes &
 the lime together) you maye put sicken spane thic-
 knes

kenes of yearth in the bottome of the tubbe, and then
 the fingers thiknes of the sayd lyme and ashes;
 and vpon the same after, another spanne thiknes of
 yearth, and on that like wyse, another three or foure
 fingers thiknes of lyme and ashes: and so puttinge
 one reue of one thing, and another of another, you
 shall fill all the buttes and tubbes; or other bedells
 that you haue placed, enen as aboue I haue sayde;
 within a span of the mouthes of theim: and the reue
 that is then emptie, which you leste, you muste fill
 with water: the which running throughte all the
 yerthe, by a littell & a littell, you muste let it droppe
 in the tubbes that stonde vnder to receyue it, or in the
 gutter or channell or where you liste, so that it be to
 beyd into one or into sundrie tubbes, or where you
 thincke good: and so you muste see wel that you
 gether all the water that you powred vpon the yea-
 the, after it is passed throughte the holes of the bottom
 of the tubbes, in suche wyse, that it bringe with it all
 the substance and vertue of the Saltpeter that was
 in the sayde yerthe wherof by puttinge sum of it on
 your tonge, you maye taste: and findinge it bitinge
 and very salte, it is a token that it is good & that you
 haue doen well: if not, powder it againe vpon the be-
 rie same yerthe, or vpon sum other newe but findinge
 the firste yerthe full of substance as muche as suffi-
 ceth, you maye againe powder vpon it more water, to
 washe better the remnante of the yerthe: albeit this
 seconde water woulde be saued in an other vcell, and
 after this, the yerth maye likewise be washed the thir-
 de time, to thintente that all the substance therof,
 maye perfectlie be gotten: but this seconde nor the
 thirde, ought not to be mingled with the firste, if it
 happen not to cum of the verie same taste: the whiche
 I beleue that it wil not: but it must be put by it self,
 in other vcells, so that it is good to powder vpon the

The making and refining

change of the nette yearth, and so you maie procede,
gathering a good quantitie of suche water, taking hede
neverthelesse, that it be full of the substance of Salt-
peter: the whiche if it seme vnto you, not of the same
perfection, as you would haue it, you maie powze it
again vpon the verie same yerth, or vpon other new,
till suche time as it satisfie you, and that you knowe,
that it be full of the substance of Saltpeter. Besides
this, there must be made a furnes with one or ij. caul-
drons of brasse walled theron, whiche must be as great
as those that the Miers vse, and these cauldrons must
then be filled, with the foresaid Saltpeter water: the
whiche (as alrede I haue tolde) ought to be as full of
substance as maie be, so that it haue about the .ij. third
partes, and make it faire and softlie to boile so muche
till it cum to one thirde part, or there aboutes: and af-
ter take it of, and put it to settell in a great vessell, co-
nered, whiche muste bee well bounde aboutes, with
hoopes of yron, and sure & close in the soynng therof,
to the intent it spill not: and thus when the same wa-
ter is settled and well clarified, and from the yearthie
and grosse matter, whiche in it remained, diligently
purged, it muste bee taken oute and boyled agayne of
newe in the same cauldron, or in sum other: and soz as
much as enery time that it boileth, if it be not taken
hede of, it turneth into skum, and somtymes swelleth
so muche, that often tymes runnyng ouer it spilleth,
and cartieth awaye therewith muche of the good: the
whiche myndynge to remeade, you muste take three
partes of Oke ashes, and one of lime, and moreouer,
in euerie hundred pounde waighte of water, there
muste be dissolued fower pounde of roche Alum: and
when the cauldron boileth, take of the sayde water
with a pot, and powze into it ones or twice, and spe-
cially when you see the saltpeter water rise in skum,
whiche in a little while you shall se it alate, both clere
and

and faire, and of an azur colour: and it must be boiled so long, till all the thin watrines bee vapoized awaie, and the substance of the saltpeter thickened: so that it being taken out, and put in chesses or tubbes and cooled, maie congele: the whiche is beste doen, when the water is brought to least quantitie, taking it out and puttyng it into a lesse caudion, wherein it will soner congele: the whiche water being tasted, and seen to be brought to suche passe, to be redy to congele, you may take it out, and put it in becelles of wood, or of pearth that are rough within, with certain stiches of wood, to congele, and so you shall let it coole, and reste. iij. or iiij. daies, so as it maie drop, and be strained thzough some little hole, in the botom of the vessell: and all the water that is not then cogeled, you must take out and saue for to seeth again: and the saltpeter that is in any quantitie congeled, you shall finde to be, accoꝝdyng to the vertue that was in the water, or in the yerth: but the clerenes and fairenes therof, will cum of the maister vertue of the water, that is put into it in the boiling, whiche hath strength to purge it, and make it cum, as it wer refined in the first seething: now this beyng taken from the sides of the vessell, where it cogeled, and in the water therof washed, you must laie it vpo a tabelle to drie thzoughly: & the same sempyng vnto you to haue nede, or neuerthelesse myndyng to haue it aboue the comoꝝdite, for some purpose, moze purified, & without yerthie grosnes, & altogether without fatnes and saltnes, which for to make exceeding fine powder, or aquafortis, is muste requised so to bee: to bee chozte, for what so ener cause it ought to bee refined, I counsell you, to doe it after one of these. ii. waies, whiche here folowynge, I shall teache you: The first, whiche I like best, is with water: and the seconde is with fire, with water it is refined in this maner, taking of the forsaide mixture made of lime, ashes, and allome desolved: &

¶ then

107 The making and refining

then for euery harrill of water that you haue put in the cauldron, for to dissolue the saltpeter, you muste put into it six potfulls of the forsayde stronge water: and in the same quantetie of water so prepared, put so muche saltpeter as you thinke maye well be dissolued: and with boylings make it to resolue verie well, and seinge it in boylinge to haue taste by skum, you shall then take it oute of the cauldron, and put it into a tubbe, in the bottom wherof, you muste firste haue put sower fingers thiknes of fine sande clea washed, and that muste be keenered with a linen clothe: and by a littel hole made in the bottom of the tubbe, you shall suffer it to droppe by littel & littel into sum other vessel set vnder to receiue it: & so this water thus strayned, you muste after put in the verie same or in an other cauldron to boile agayne, & to make the greater parte of the same water, that you put into it, seeth awayne: finally make it boile so muche, untill you see it red: die to thicken, powderinge nowe and then, in makinge it, a littel of the forsayde stronge water, and specially when it swelleth and casteth by skum: and this thinge (beinge so handled) you muste take oute of the cauldron, and put it in chesses or other vessels of wood, to congeale: whiche, beinge a greate quantetie, in three or sower dayes, you shall finde all that congealed, which will coeall: which, beinge taken oute, you muste order as you vsed afoze the other: and the same water that is not congealed, muste be boiled agayne: and so you shall doo from time to time as it gathereth together and coealeth: and after this sorte you shall make the saltpeter moste white and faire, and muche better then at the firste seathing.

Also saltpeter is refined in an other manner, whiche is with fire, but in a littel quantetie mynding to doe it well: & although it be a red die waye, yet fewe vse it: albest it serueth to get oute the fatnes of saltpeter,

ter, so that it sendeth into the bottō very muche pear-
thenes, not withstanding I like better the soylapde
waie in purginge it with water, then this with fier:
But to doo this, take a salet, or sum other yron or
brazen vessel, and fill it with saltpeter, and keuer it
with a keuer of yron, brasse, or pearth, so that it be made
bighe inoughe, mete to bee taken of and put on when
you liste, that the vessel maie be wel keuered: & then
it muste be set in the midst of a good fire of coles,
and so the saltpeter will melte: whiche is sounne per-
ceyued of the experte artificer: but when you thinke
that it is molte, loke vpon it: and if it be not well mol-
ten, keuer it again and let it melt well: then it being
well molten, take bymstone mosse finelle beaten in
powder, and strawe sum thereon: and if of it selfe it
take not fier, doe you kendel it: and beinge kendeled
let it burne till suche time as the bymstone be all con-
sumed, so that nothinge else be burnt, but the vper
parte, and certayne grosse vnctiousnes of the saltepe-
ter, the which when it is burned, will leaue the reste
saire and cleare: and then it muste bee taken from
the fire lettting it coole, where in the vessel you shall
finde it (when it shalbe coulde) all in one pece white
like vnto a pece of marbell: and all the pearthienes
therof remaininge in the bottom: whiche shalbe good
saltpeter to make powder withall, but not verie com-
mendable to enie other vse: and aboute saltpeter the
wytte of men haue so muche imagened, that means are
foude to cause it to growe in the grounde, and in pla-
ces, that neuer had enie befoze, by dissoluinge saltepe-
ter in water: so with the same water weating the
grounde, and letttinge it stande so a certayne space of
time, saltpeter will be ingedzed, so that the same that
was put there, will multiplie wonderfully: and it is
a mosse certayne thinge, that in makinge saltpeter,
the pearthe that hath ben occupied, heaped vp in a

The making

place that is couered, so that the raine doe not washe it, within the space of fyue or sixe yerres, maye againe be labored, and saltepeter shalbe founde to bee ingendred, and yelde muche more, then it did the firste time: and this that I haue declared in this chapter, is as muche as I can saie of saltepeter.

The maner howe to make all sortes of
Gunpoulder. Chapter. xxiiii.



Gunne powder, is made of three simples onely: that is, salt peter, Brimstone and Coales: and some proportioneth it after one fashion, and some after an other, and also according to the Gunnes, and purposes, wherewith they will occupie it. For that one sorte is occupied for greate ordinaunce, and an other sorte for lesse yerres: and this is knowen to every Bombardier: In Harkebuses, and hande gunnes, is not occupied common powder, but aboute certaine fire-woorkes: and therefore to every of the saied purposes, the pouders is proportioned accordinglye. For that if Serpentine powder, should be occupied in hande gunnes, or Harkebuses, it would scant be able to drive their pelletes a quaites casse, fro their mouthes: and if hande gunne powder should be used in peeces of ordinaunce, without great discretion, it would quickly breake or marre them: and to minde to haue all sorte of pouders good, three thinges is requisset to bee obserued, in making thereof. The firste is to see, that the substance, wherewith it is made, haue no yearthie grosenes. The seconde, that it be finely beaten: the thirde, that it be very well dried, from all humiditye or moistenesse, and this doen, you shall haue
strong

Strong and excellent good powder. And it is to bee understood, that the chief thyng that is in powder, is Salt peter: so that of it (by the same that is seen) dependeth all the force. And therefore provision is to be made, to have a good quantitie thereof, and that it be cleane and nete: the whiche by burnyng, may well be knowen, so that in all sortes of powder, it is nedeful, that the Salt peter be good.

Now, so to make common powder, so great peces of artillerie, there must be take thre partes, of refined Salt peter, two of Willow coales, and one of Brimstone, and grinding every thyng: all must be wel mingled together, & all the moistnesse thereof dyed by, as I have saied. To make powder so small peces of artillerie, there muste bee taken five partes, of refined Salt peter, and one and a halfe of Coales, and one of Brimstone, and grinding it moste finellie, and minglyng it well together, it muste bee coyned, and then dyed. The maner of coynyng all sortes of powder, is with a Seene made, with a thicke skinne of Parchement, full of little rounde holes, into the whiche seue the powder must bee put, while it is danke, and also a little bowle, that when you liste, maye rolle by and doune, vpon the clottes of powder, to breake them, that it maye coyne, and runne throughe the holes of the Seene.

To make Harkebusse and hande Gunne powder, there must be taken tenne partes of refined Salt peter, and one of young basell coles of a yere olde made cleane, and one parte of brimstone, and beatinge all in a mortar or grindinge it exceedingly well that it maye be mingled together and so fine as is possible, then it muste be coyned and thoroughlie dyed. And note that if it be not marvelously well beatē, it will neuer be good. But bycause makinge of powder, whiche ar of thynges that will easelie kindell, cannot be withoute
perill

perill of him that maketh it, excepte it be remedied
 with beating: therfore it behooveth to take hede that
 it be not beaten dyle, as well to avoide suche perill,
 as also for that it wilbe beaten better: for whiche cau-
 ses it muste be wet with comun water to a certaine
 degree of moistenes, so that taken up in ones hande
 it maye clingh together. Sum moist it with vineger:
 and sum, for to make it moze stronger, with capored
 aqua vitæ. When I haue caused gunpouder to bee
 made, I haue used comun water, and therfore I am
 able to saye whiche of those thinges is best: and to tell
 my opinion, I doubt whether vineger or aqua vitæ
 causeth the gunpouder to be a little better then the co-
 mun water: for as muche as they vapoze awaye,
 as they doe, and as of necessitie they muste, I beleue
 that littel of their substance remaineth. There be
 sum whiche in makinge cole (besides wellowe) make
 them of basell: and sum of hyne stickes: and sum of
 baie stickes: sum of reedes: sum of keeles: and so bee
 shorte, all the coles that are made of softe wood, or of
 wood whiche haue muche pith: but it is requiset that
 they be smalle, yong, and tender, and withoute harde-
 nes of knottes: otherwys they be not good: Albeyt
 they be made in diuerse maners: but in makinge of
 enie greate quantetie of pouder, the ordinarie cole
 is to be taken: and makinge a littell, they vse to take
 ponge basell of a year olde, cut in shorte peses, & then
 puttinge them into a great perthen pottle, or other
 vcell of yron, or brasse, they shutte it & keue it close,
 and lute it or daube it verie wel aboute, so that it can-
 not breathe: and then they make fire rounde aboute
 it and vpon it, till suche tyme as it maye be thoughte
 that the heate is well entred in throughe all, & that the
 wood that is within is very well fired: & without fire,
 byandes, or flame, burned only throughe suche heate:
 and then they take the fire from the pottle and let it
 coole,

How to make
 the cole wher
 with gunpoul-
 der is made.

and so they finde the same wood becom cole. I hap-
ning onse to haue nede of coles (to thintente to make
sum quicklie, toke as mane drie basel stiches that had
theire ryndes scraped of, as I thought sufficiente to
serue my purpose: and bzeaking them in pees and lat
ynge them close together on a hepe, I set them on
fire and burned them all well, and then spzinkeled
water vpon them with a bzoume, and with the same
wet bzoume quenched the fier: & so scattered abrod the
coles heare and there, allwayes spzinkelinge water
vpon them till I quenched them: and thus I haue ser-
ued my purpose withoute so muche difficultie.

Howeouer it is a verie pzooffitable thinge, yea and a
necessary, that I declare the maner & faciletie of bea-
ting it, soz to be able safelie to make a greate quante-
tie therof. In olde time they wer wonte to grinde gū-
poulder with certayne handemilles, as they vse to
grinde cozne, but (besides the paine) it is a waye verie
perrillus: soz that suche a composition grownde toge-
ther with stones, will catche heate in suche wyse, that
it wil sone ingēder fire, inespettialy euery thinge being
a matter disposed to fire: as also by rubbinge together
with violēce a cople of baye stiches, yow shal straigh-
te waye kendell fire. Sum grinde poulder in suche
mylles as they vse to grind crabbes oz apells to make
bargis oz cider: and sum hathe it stamped in moztars
with a water mille oz a hozsemill, which waye is the
beste of all other, and mosse sureste and also it is bea-
ten finelie, and with lesse laboz and paine: Sum (that
hathe not the comoditie of water) make a greate
wheele, deuised after suche sozte, that with the togges
therof it maye raise vp many heuy pestells, whiche fal-
linge, beate in diuers moztars of wood made in a bea-
me of oke, of the whiche there be sum haue the bot-
tomes of bzasse.

Sum stampe with theire armes, with a great pestel

The making

tied to the ende of a pole with a corde, righte ouer, a morter of wood or byasse, and so they beate the easelier: other some beate it in a stone morter, with the mouthe sumwhat large, with a wooden pestell, with the handel therof made like vnto a hamner or a mall. And these, and other, that maye be made, is as moche as aboute the deuise of beating and making gunpowder is nedefull.

They haue vsed heretofore to waighe euery matter by it selfe, and then they haue gone mingling and beating all together: There haue been after, sum that haue deuised to beate euery thing seuerally by it self, and then mingell'd alltogether and made it. But finally the beste and moste readiest waye, is to take a quantetie of saltpeter, wherewith you will make your powder, & put it into a cauldron with so much water (as being set vpon the fire) maye bee thought sufficiente to disolue it: whiche so sone as it is resolued, muste be taken of and set on the grounde in a cold place: and the quantitee of beaten coles that is sufficient, muste be put into it, and so stirring it aboute, muste be mingled well with the saltpeter desolued: and then taking your bysmstone finely beaten in powder, and with a staffe stirring about the coles and the saltpeter, you muste strawe it finely vpon the same, as well as you can, with continuall stirring and minglinge them together, whiche composition thus made, you muste then drie sumwhat in the sunne: and then to haue it excellently well made, there nedeth no other to be doen, but to beate it all together, to the intente that it maye incorporate moste finely, whiche doen, you must drie it with moste greate diligence: and then sift it very wel throught a seue, and moistning it again with water or vineger, stirring it sumwhat together in a seue, you maye cozne it as alreadie hath ben declared: and then againe so to occupie it aboute
your

your busines you muste dye it well: and so beeyng dyed, put it into dye betells of wood to kepe: and set it in the higheste places of your house, where fewe cometh for diuers respectes: and though it wer for no other, at least to kepe it dye. They that are experte, knowe good powder in this maner, by the colo: for that if it be verie blacke, it is a signe that it is made with verie muche coles: or that it is moiste: and when you rubbe it vpon a pece of paper it will black it moze then it ought to doe: and drawing it with your finger, you maye see whether it be finelie beaten or no: for it muste be so muche beaten that nothing, neither of saltpeter nor of Brimstone be discerned in any wise: for with reason they ought not to bee seen: they take also for a triall, thre or fouer coynes of powder, and laye theim vpon a white paper, distaunte thre fingers, the one from the other, and fire one of theim: and if the powder bee good, you shall see theim all to fire at ones: so that there shal be no residue remaining, neither grosenes of Brimstone, nor of saltpeter, nor of any other thing, and the paper not burnt. And if it be not so founde, thei knowe that it is euell made, or not good, but full of yearthenes of Saltpeter: or that it is moiste, so that it is naughte for shooting of ordinaunce, besides the perrill that it putteth them in. And vndoubtedly naughtie powder, is a coffe halfe casse a waye: and it is a greate faute in him that maketh it, or that causeth it to bee made: for that in time of nede, it is of no effecte, & causeth muche shame to the Gunners, whiche occupie it: and therefore diligence ought to be vsed and, good hede taken that it be made accordyng as I haue taughte. There are many whiche byyng by lies, sayng: that they can tell howe to make powder that shooting it in gunnes shall make no noise, the which is impossible, the fire and the airc violentlie incountering together, where besides that

H. V. they

The making

they ar not able to doe the same they saye, with a pece
of ordinaunce, they ar lesse able to doe it with one of
those potgunnes of elder that boyes vse to shute pa-
per and floures in, by the noyse of whiche, maye well
be perceiued, that all proceedeth of breakinge of the
ayze. Also there be manie that saye, that they cā make
white poulder, that shall not blacke ons handes, by
putting in a certaine thing in the stede of coles: sum
other, redde, with dried red floures: and other blew,
with blew floures: sum other saye that to make the
poulder of more force and strengthe, that it is verie
good to put to euery pounce of bymstone an ounce of
mercurie, the bymstone being first put in by a littel, &
a littel. Moreover there ar sum other that saye, that for
to make the like, there ought to be put to euery pound
of saltpeter, a quarter of an ounce of salte armo-
niac: sum other there be also, whiche saye that in the
stede of coles, it is better to take linen clothe and to
burne it to tinder, and therewith to make poulder,
whiche is more excellenter then any other cole that is
possible to be used, aboute suche a purpose. And all-
though that in my iudgemente I haue declared all-
redy the best receites, that is for the makinge of all soz-
tes of gunpoulder, yet to the intente that it maye bee
vnderstonde howe muche mē haue trauailed and ima-
gened to bring the same to all perfection, I haue
thought good to shew heresollowing diuers moe re-
ceiptes bothe good and bad, whiche for the ma-
kinge of poulder haue ben experientised
of sundrie men.

The

The first inuention and oldeste maner in making
of serpentine poulder, or poulder
for ordinaunce.

1 Saltpeter
Wimstone
Coles

1. parte.
1. parte.
1. parte.

The next practis of making poulder
for ordinaunce.

2 Saltpeter
Wimstone
Coles

19. partes.
9. partes.
9. partes.

Poulder for ordinaunce of a
newer making.

3 Saltpeter
Wimstone
Coles

1. partes.
19. partes.
19. partes.

Poulder for ordinaunce not
so olde.

4 Saltpeter
Wimstone
Coles

19. partes.
19. partes.
9. partes.

Poulder for ordinaunce not
verie olde.

5 Saltpeter
Wimstone
Coles

11. partes.
9. partes.
19. partes.

Poulder used of late dayes for
bandgunnes.

6 Saltpete

The making

6 Saltepeter	liij. partes.
Wymstone	l. parte.
Coles	l. parte.

Poulder for ordinaunce bled not so longe agon.

7 Saltepeter	xx. partes.
Wymstone	ij. partes.
Coles	r. partes.

Poulder for ordinaunce bled of later dayes.

8 Saltepeter	c. partes.
Wymstone	r. partes.
Coles	rrrvi. partes.

Grose poulder of a newer sozte.

9 Saltepeter	c. partes.
Wymstone	rr. partes.
Coles	rrrbij. partes.

Fine poulder of a making not very olde.

10 Saltepeter	lx. partes.
Wymstone	ij. partes.
Coles	vi. partes.

Grose poulder of a newer making.

11 Saltepeter	ij. partes.
Wymstone	l. parte.
Coles	l. parte.
	Darka

Barhabus poulder of a newer making.

- | | |
|--------------------------|-------------|
| 12. Saltpeter | 19. partes. |
| Brimstone | 1. parte. |
| Coles of willowe stiches | 1. parte. |

Finer poulder of a newer making.

- | | |
|--------------------------------|------------|
| 13. Saltpeter often refined. | 6. partes. |
| Brimstone | 1. parte. |
| Coles of longe basell stiches. | 1. parte. |

Grosse poulder of a newer making.

- | | |
|------------------------|-------------|
| 14. Saltpeter refined. | 19. partes. |
| Brimstone | 1. parte. |
| Willow coles. | 9. partes. |

Poulder of a newer making.

- | | |
|----------------|-------------|
| 15. Saltpeter | 1. partes. |
| Brimstone | 9. partes. |
| Willowe coles. | 19. partes. |

Barhabus poulder bled nowe adages.

- | | |
|---|------------|
| 16. Saltpeter very often refined. | 1. partes. |
| Brimstone | 1. parte. |
| Coles made of basell twigges with the barke pilled. | 1. parte. |

Handgun poulder of a newer making.

- | | |
|------------------------|--------------|
| 17. Saltpeter refined. | xxv. partes. |
| Brimstone | 19. partes. |
| Coles | |

The making

Coles of basell hauing their ryndes pilled of iij. par.

Handegun poulder of a stronger and of a newer making.

18 Saltpeter refined lxxij. partes.
Wimstone i. parte.
Coles of longe basell i. parte.

Finer and stronger handegun poulder.

19 Saltpeter diuers times refined lxxij. partes.
Wimstone i. parte.
Coles of yong basell thogghes hauing their ryndes
pilled of i. parte.

Grosse poulder bled nowe adayes.

20 Saltpeter lxxij. partes.
Wimstone i. parte.
Wallow coles i. parte.

Grosse poulder bled nowe adayes.

21 Saltpeter xx. partes.
Wimstone lxxij. partes.
Wallow coles b. partes.

Handegun poulder bled nowe adayes.

22 Saltpeter refined dyle xlviij. partes.
Wimstone cetrine viij. partes.
Basell coles lxxij. partes.

Handegun poulder bled nowe adayes.

23 Saltpeter refined. xlviij. partes.
Wimstone ij. partes.
Basell coles iij. partes.

The

The maner that is vsed of charging and shooting
of ordinaunce. Cap. xxv.



For as muche as if Gunners
shulde chaunce to be slaine or other-
wise lacking, to the intente that
euery souldier in time of nede maye
knowe how to serue in one of their
stedes, I haue thought good and ne-
cessarie, to shewe & declare the ma-
ner of charching and shooting of peeses of ordinaunce.
Wherfor it ought to be vnderstode, howe much poul-
der is occupied atonse in charging of euery peece,
whiche mosse comunly, is twoo thirde partes, of that
whiche the shotte or bullet therof wayeth: as for exam-
ple if the boolet of a peece of ordinaunce wayghe. xxiij.
pounde, then there muste be taken. xliij. pounde of
pouder for the iuste charge of the same peece. And
then with a longe staffe that hath at the one ende a
bob as bygge as the boolet of the peece, & at the other
ende a labell made for the same purpose that wil take
so muche pouder by at twyse or thryse, as is aforesayd,
the peece muste be charged, after this sorte. Take the
labell full of pouder, and thrust it into the Gunne so
far as it will goe, and then turne your hande with
the labell that the pouder may fall oute and remaine
there behind when you pull out your labell: whiche
doen, you muste with the bob ende therof, thruste the
pouder home faire and softely: and so with the labell
taking by the reste of the pouder you muste doe like-
wise, and thruste after at the laste a wispe of hey or
of sum thing els, to swepe all the pouder together,
and then the bullet whiche muste be of a fitte biggnes
for the peece: And also an other wispe to stay the bollet
for rolling oute: & putting sum pouder in the touche-
hole & aboute the touchhole, the Gunne is then char-

of Artillerie.

ged. So we to lenell it, a man muste stande directly be
binde it, and with a lower, turne it this waye, or that
waye till suche time as it be brought to lie iusse, as a
man will haue it, so that loking straighte from the
byleche or hinder parte of the peece as lowe as maye
be vpon the vpper parte therof, he may see the mouth
of the peece to lie even with the marke and as it wer
to keuer it: whiche doon, if the grounde wheron it
standeth, be even, as it is requiset to be, & that the one
whele stande not higher then the other, gyuing fier
to it with a linte stocke which is a matche fastened to
the ende of a staffe of a yarde or twoo yardes longe,
you shall se the shot to strike the same thing that you
shot at, if it be within enie reasonable distaunce. And
soz moze spedie shooting of ordinaunce, the iuste charge
in poulder of euery peece maye also hande be prepared
in a rebdines, and put in bagges of linnē or in greate
papers made soz the same purpose, which in a sodain
maye be chopte into the mouth of a peece with the
boollet or shotte thereof thruste after, as far as they
will go we, and then thrusting a long wyer into the
tooche hole that may perse through the bagge or pa-
per wherin the charge of poulder lyeth within the
peece, filling the same toochehoole with cozne poulder
so sone as it is leneled, it maye incontynente be shotte
of: which maner of charging is doē moſte quickly and
a greate deall soner then enie other waye, and

when haste requires, verie

nedefull.

How

to charge a peece of ordinaunce with poulder
in a rebdine, and to put it in bagges of linnē
or in greate papers made soz the same purpose,
which in a sodain maye be chopte into the mouth
of a peece with the boollet or shotte thereof
thruste after, as far as they will go we, and
then thrusting a long wyer into the tooche hole
that may perse through the bagge or paper
wherin the charge of poulder lyeth within the
peece, filling the same toochehoole with cozne
poulder so sone as it is leneled, it maye incontynente
be shotte of: which maner of charging is doē
moſte quickly and a greate deall soner then
enie other waye, and when haste requires, verie
nedefull.

How

to

Hovv to get oute quicklie the nailes that shulde happen
by trealon, or othervvyle to be driuen into
the toucheholes of ordinaunce,

Cap. xxvi.



If it shoulde fortune at
some sodain assault, y^e touche
holes of the artillerie to be
nayed bp, after suche sorte
as they cannot be discharged,
or shot of, the speediest way to
vnnaille the, is firste to charge
againe all suche pises of ar-
tillerie, with smaller bullet-
tes the their ordinarie: and when they are so charged,
to level them toward those places where neede requi-
res, even as they should have ben, if they had not ben
nailed: and then there muste be made a traine of poul-
der, along the bottom of the canes, from the mouthes
to the bollettes of every pise of ordinaunce: and to the
intente not to shoote them in vaine, you may carrie
for occasion, and occasion serving to shoote them, you
may gyue fier at their mouthes, where besides that
they shall doo their ordinary effectes, they shall all in
the discharging, be vnayed, blowing out the same
nailes or pinnes of yron, where with their toucheholes
wer stopped: and so doyng, of suche nailing there shall
happē no great harme. But if sum of them for being
beaten in harder then other, shuld chaunce at the first
not to be drien oute, then the remedy is, to charge
them againe, and to shoote them of, after the saide ma-
ner, putting on the toucheholes a littel oyle made very
hot, heating also firste the place that is nayed, with
a burning cole, making mozeouer with clay, vpon
the pise, a littell cuppe aboute the hole, that may
holde the hot oyle that is poured vpon it, after suche

3.ij.

sorte,

A discoorse

sozte, that thzough the beate therof, it may soke into the hole with the yzon in it, whereby the same yzon shal then be made so slippery, that at the nexte discharging of the pese, the sury of the fire mosse easely shall blou it oute.

Hovv much the artillerie ought to be esteemed of the armies novv adayes, and vvwhether the same opinion of them vvwhich is had vniuersally, be trevv.

Cap. xxvij.



Considering how many battailes and dedes of armes, wer made of the Romaines at sundrie times, there is cum vnto me in consideration, the vniuersall opinion of many men, which is, that if in those tymes there had ben ordinaunce, the Romaines shuld not haue ben abell to haue conquered, no; so easely haue won the cuntries, & made the people their tributaries, as they did, no; they shoulde not haue in enie maner made so mightie conquestes. They saye also, that by mean of this instrument of fire, mē cannot vse, no; shew their strength and vertue, as they mighte in olde time. And they adde a thirde thing, that they come with more difficultie to saighte a felde then they cam in those dayes, no; there cannot be kepte in them the orders of those tymes, so that at length the warre shalbe brought to consist altogether in artillerie. And mpynding to wypte, whether suche opinio be trew, and how muche the artillerie hath increased, or deminished the strength of armies, and whether it taketh away, or ggueth occasion to good Capstaynes to doo valliantly, I will begin

begin to speake concerning their firste opinion, that the aunchiēt Romaine armies shulde not haue made the conquestes which they did, if the ordinnance had ben in those dayes. To which answering I say, how that warre is made eyther to defende, or to offende. Where first it is to be examened, to whom these two maner of warres causeth mosse proffit, or most hurte. And albest ther is what to say of either part, notwithstanding I beleue, that withoute cōparison, they doe moze harme to him that defendeth, thē to him that inuadeth. The reason is, that he that defendeth, is either in a toun, or in a cāpe within a trēche. If he be within a toun, this toun is eyther littel, as the mosse parte of fortresses ar, or it is greate. In the first case, he that defendeth, is altogether losse: for that the violence of the artillerie is suche, that ther is no wall, how great so euer it be, which in few dayes it battereth not dou. And if he that is within, haue not space inough to retire, bothe with ditches, and with rampiers, he is ouer cum, because he is not abell to withstāde the violence of the enemye, who thzough the breache of the wall, will after enter: nor in this case, the artillerie which he shulde haue, shall not helpe him: for that this is a generall rule, that where men in a thzong, & with violence may goe, the artillerie cannot withhold thē. Therfore in the defence of a toun, the furie of the enemies cannot be withstōde. Though the assaltes the which are not thzonged, but scattered, which be called scirmishes be easely withstōde. And they which goe with this disorder, and coldenes to a breache of a wall, where artillerie is, doe goe to a manifeste deathe, and againste them the artillerie pzenalleth: but those, which assaulte a breache in a thzong harde together, so that the one thzussteth forwarde the other if they be not holden oute of dyches, or of rampiers, they enter in every place, and the artillerie kepeth them

A discoorse

them not backe, and though sum be slaine, they canot be so manie, that they shall let the victorie. This is knowen to be trew, by many expugnations of townes made in Italie, and in espetiallie in the same of Brescia: for as muche as the same towne being rebelled from the frenchemē, and yet the fortreſſe being kepte for the King of Fraunce, the Venetians for to withstande the violence, which from the same might cum into the towne, had laid all the strete full of Artillerie, which descended from the fortreſſe to the Citie, & they planted them on the fronte, and in the flanks, and in euery other fitt place. Of the which Mounſier de Foix made no other coupte, but with his squadrons, coming downe on foote passing through the middest of them, got the citie: nor it was not knowen that he receiued by those enie notabel hurte. So that he that defendeth him selfe within a littel towne (as hath ben sayde) and findeth the wall on the grounde, and hath not space to retire with rampiers, and with diches, and is constrained to truste vpon the artillerie, is ouercum straight way. If thou defendest a great towne, & wher thou haſte comodity to retire, yet not withstanding withoute comparison, the artillerie is moze profittable to him which is withoute, then to him that is within. Firſte, to mynde to haue a pece of Artillerie hurte those withoute, thou arte constrained to get the vp with it from the plaine grounde of the towne: because standing vpon the plaine grounde, euery littell banke and rampier that the enemye may make, shall cause him to remaine safe, and thou canst not hurte him, so that being driuen to stande aloſte on the toppe of the wall, or in what so euer other maner on high, thou doſt well after the twoo difficulties. The firſte is, that thou canst not bring vp so greate and mightie peſes of artillerie, as he withoute may ſhoote, being not able in littel spaces to handell great thinges. The other

other is, that although thou couldest bring the, thou
cāst not make suche strōg & sure defence for to save the
said artillerie from dismounting, as they without may
doe, being on the ground, & hauing that comoditie and
that rōme, that they them selues like. So that it is im-
possible for him that defendeth a towne, to kepe the ar-
tillerie on high places, when they which are without
haue great ordinaunce inough. And if they be dytuen
to come with them on low places, they becom for the
moste parte vnprofitable, as hath ben sayde. So that
the defence of the citie, is brought to be defended with
armes, as in old time they did, and with small artille-
rie. Of which if there be gotten a littel profite (ha-
uing respecte to the same small artillerie) there is got-
ten so much incomoditie, as counterpealeth the co-
moditie of the artillerie: for as muche as hauing res-
pecte to the same, they make the wals of townes low,
and as it wer vnder grounde in ditches, so that so sone
as they cum to the battaile at hande, eyther because
the walles are batterd, or because the dykes are filled
up, he that is within, hath muche more dissaduantage,
then he shoulde haue had in times past. And therfore
(as afoze is sayde) those instrumentes helpeth muche
more him that besiegeth a towne, then he that is be-
sieged. Concerning the thirde thing, to lye in campe
within a trenche, so the intēte not to saight the fielde
but at thy comoditie, or aduantage, I say, that in
this parte thou hast no more remedy ordinarie to de-
fende thee from saighting, then they had in olde time.
And sumtymes, considering the artillerie, thou haste
greater dissaduantage: for that if the enemy meete
with thee, and haue a littell aduantage of the coun-
try, as may easely chaunce, and finde him selfe higher
then thou, or that in his coming thou hast not yet made
thie bankes or rampiers, and keuered thee well with
those, straghte waye, and befoze thou haste eny reme-
die,

A discoorse

die, he vnlodgeth thee, and thou arte constrained to
issue oute of thy fortreffe, & come to saughte: the which
happened to the Spaniards in the battaile of Ka-
uena, who being forted betwene the ryuer of Ron-
co, and a banke, because they lay not so highe as suffi-
ced, and so that the Frenchmen had a littell the ad-
uantage of the grounde, they wer constrained of the
artillerie to issue oute of their fortreffe, and cum to
saught. But admit that y place, which thou hast taken
with the campe, wer muche higher, then the other a-
gainste it (as so) the moste parte it ought to be) & that
the bankes or rampiers wer good and sure, so that by
meanse of the situation, and thy other preparations,
the enemy durste not assaulte thee, it shall cum in this
case to those maners, which in olde time it cam, when
one was with his army in place not possible to be bur-
te: the which ar to ouerun the countrie, to take, or be-
sege the townes that ar thy friendes, to stoppe thee thy
virtualls, so that thou shalte bee constrayned of sum
necessetie to vn lodge, and cum to sayghte the fiede,
where the artillerie (as hereafter shalbe sayde) doeth
not muche hurte. Considering then what kynde of
warres the Romaines made, & seing how they made
almoste all their warre to innade other men, and not
so to defended them selues, it shalbe seen (when the
things sayde afoze be trew) how they shuld haue had
more aduantage, and muche souner shuld haue made
their conquestes, if ordinaunce had ben in those dayes.
Concerning the seconde thing, that men cannot shew
their strenght, as they mighte in olde tyme, because of
the artillerie, I saye, that it is trew, that where men
scattered doe shewe it, they stonde in more perrill,
then in those dayes, when they had to scale a towne,
or to make lyke assaltes, where men not thzonged to-
gether, but severally the one fro the other did appeare.
It is also trewe that the Capitaines, and heddes of
armies

armies, stande moze subiecte to the perrill of deathe, the in those times, because they may be reached with artillerie in all places, no; it helpeth not them to bee in the rerewardes, garded with moſte ſtrong men. Not withſtanding it is ſeen, that the one and the other of theſe twoo perrills, doo ſeldom times extraoꝛdinarie hurtes, ſo; that the townes well appointed and furniſhed with munition ar not ſcaled, no; they goe not with weake aſſaltes to aſſalte them: but mynding to winne them, the matter is broughte to a ſeige, as in old time they did. And in thoſe, which neuertheleſſe ar won by aſſalte, the perrills ar not muche greater then they wer in thoſe dayes: ſo; that alſo in thoſe times, they which defended a towne, lacked not thinges to throw and ſhute, the which (though they wer not ſo furious) they did concerning the killing of men the lyke effecte. Concerning the death of Capitaines and conducters, there hath ben in. xliij. yeres that the warre was of late dayes in Italy, leſſe examples, then there was in x. yeres with the antiquitie: ſo; that excepte Count Lodouike of Mirandola, who died at Ferrara, when the Venetians, a few yeres ago, aſſalted the ſame ſtate, and the Duke of Nemours, which died at Cirignuola, there hath not hapned of the artillerie enſe to be ſlaine: ſo; as muche as Mounſier de Foix at Ravenna, died of yꝛo, and not of ſer. So that if men ſhewe not particularly their ſtrengthes, it groweth not of the artillerie, but of the naughtie orders, and of the weaknes of the armies, the which altogether lacking ſtrength, cannot ſhow it in parte. Concerning the thirde thing ſayde of them, that men cannot cum to hande ſtrokes, & that the warre ſhalbe broughte to ſtande altogether vpon artillerie, I ſaye, that this opinion is altogether falſe: and ſo alwayes ſhalbe taken of thoſe, who according to the aunciente vertue will occupie their armies: ſo; that he that will

B. i.

make

A discoorse

make a good armie, it behoueth him with exercises, eyther sained, or trow, to accustom his men to giue the charge on the enemy, and to cum to the swerdes poyncte with him, and to the graspyne by the bosom: & he ought to groude him self moze vpon the footemen, then vpon the horsemen. And when he shall grounde him selfe vpon the footemen, and vpon the sozsayde maners, the artillerie becommeth alltogether vnprofitable. For that with moze facelety, the footemen in apzoching nere the enemy, may auoyde y shot of the artillerie, then they wer abell in olde time to auoide the violence of Elisantes, of cartes full of hookes, and of other strange incoouters, which the Romaine footemen incountered withall, against which, allwayes they founde the remedie, and so muche moze easelie they should haue founde againste this, the shoyter that the time is, in the which y artillerie maye hurte thee, then the same was, in the which the elisantes & the cartes wer abell to hurte: soz as muche as they in the middest of the saighte disozdered men, these only be, soze the sayghte doe trouble men: the which impedi- mente the footemen easely auoide, eyther with going keuered by the nature of the situation, or with falling doune vpon the grounde, when they shoote: the which also by experience hath ben seen not to be nedefull, in espetially to be defended from greate ordi- nauce, the which cannot in suche wyse bee leuelled, because yf they go we highe, they touche thee not, and if they go w lowe, they will not cum nere thee. When the armies being come to handestrokes, this is moze clear, then the lighte, that neyther the greate, noz the littell can after hurte thee: soz that if the same, which hath the artillerie, be befoze, it becommeth thy pris- oner, if it behynde, it hurteth the friende befoze thee. Againe on the backe it cannot hurte thee after suche sozte, that thou arte not abell to go w to winne it, and it

it cumeth to followe the sayde effecte. For this nede
not muche disputation: for that there hath ben seen
the example of the Swizers, who at nauara in the yere
of our lord 1513. withoute artillerie, and withoute
horse, wente to encounter the Frenche armie furnes-
hed with artillerie within their fortresse, and they
ouerthrew them withoute hauing any impedimente
thereby: and the reason is (beside the thinges tolde
afoze) that the artillerie mynding to haue it worke
hath nede to be garded eyther of a wall, or of dykes,
or of bankes. And when it lacketh on of these gardes,
it is taken, or becometh vnprofitabell, as it hapneth
when it is defended with men, for where they chaunce
to be in a battayle, and in the faighte on the lande,
they cannot bee occupied by flanke, but in the same
maner, that the antiquetie occupied the instrumēt to
shoote, which they placed oute of the squadrons, for
that they shulde faight oute of the orders, & allwayes
when eyther of horsemen, or of other they wer char-
ged vpon, their refuge was behinde the legions: he
that otherwyle maketh accompte of them, hath no
skill, & trusteth vpon a thing, which easely may deceyue
him. And though the Turke by meanse of artillerie,
against the Sophi & the Soldan, hath had victorie, it
hath not happened throughe other meāse, the throughe
the feare that the horsemen wer put in by the straunge
rumor therof. Therfore to make an ende of this dis-
course, I conclude, that the artillerie is profittable in
an armie, when the aunciente vertue is mingled
therewith, but withoute the same, against
a puissance armie, it is moste vn-
profitabell.

of Muynes.

Of Muynes and placing of poulder vnder grounde, vvhen
revvith inuinsible fortresses, by fire maye be rui-
gnated, vvhen ordinaunce cannot bee
broughte vnto them,

Cap. xxviii.



The better and greater
quantety of poulder whiche is
put in a Caue that is made to
ouerthrowe a forte or Castell,
the greater vndoubtedly shal-
be the effecte therof: whiche
caue is best to be made a good
waye within the ground, and
in a harde place, to the intent
that when the same is shutte and well walled vp, the
fyre be not able easely to haue enie other waye oute,
then in ouerthrowing the thinge that is to be ruyned.
for as muche as if the ayre, and the fyre in the rume
of that inclosed place, maye haue meanse to bzeathe
oute, the forte therof wilbe of no effecte. Also it wold
be taken hede of, that the caue be not by no other
means made, so that the fyre maye bzeake oute: for
whiche cause, it ought to be made, with the beginning
therof sumwhat distāte frō the place, that you mynde
to ouerthrowe to the intente that in makinge therof,
the men of the same place doo not issue oute to lette
you, nor perceiue the certayne place of the hurte, to
be able to prouyde for it, and to make countermy-
nes to let the fyre bzeathe oute and pas withoute enie
effecte, wherby all your cosse and laboꝝ, maye be
cum bayne. Whoeuer they make these muynes, the
moste narroweste and moste crookedest that maye be,
and in espetially nere the very place that is appoin-
ted to be ouerthrowen, and therefore vnder suche a
place there muste be digged a hole that maye bee at
leaste

leaste three yardes highe o2 moze, and twoo yardes
b2odde, and that the entrie vnto it be vndergrounde
in the maner, as by this p2esente figure yow maye se
described.



And in this to put barrells with theire heddes
knocked out full of good stronge powder, betwene
whiche you muste also strawe powder inough vpon
the bo2des wheron they stonde, laynge to it a good
great matche made of cotton, boyled in vinegre, b2im
stone, and saltpeter, which must be well roled in good
serpentine powder wel d2ied in the sonne: and hauing
layde it to the place, you must make a trapne of poul-
der vpon it, enen to the golwinge oute, so that it maye
be kenered therewith: placings it in pypes of yearth
o2 tronkes of woode in the place of the entrie therof:
and that don, yow muste wall it by moste strongly,
laynge ouerthwarte great blockes of okes o2 other
woode: so that with those and with the wall, it maye
be strong to resiste the farge of the fyze, as muche as
is possible: & the entrie in suche maner made by and
fortified, when you shall thinke it tyme to b2inge the

Of fireworkes.

effecte to pas, to destroy the aduersaries, or to make a ruyn, you maye cause the trapne to bee sette on fyre, where you shall see a maruelus and horrible effecte follow. More about this matter I neede not to declare sauinge that if it shuld chaunce the myne to be made in a stonie place, where the stones wyll fall doune, that then the beste is to vnderproppe them with pipes of wood filled full of poulder.

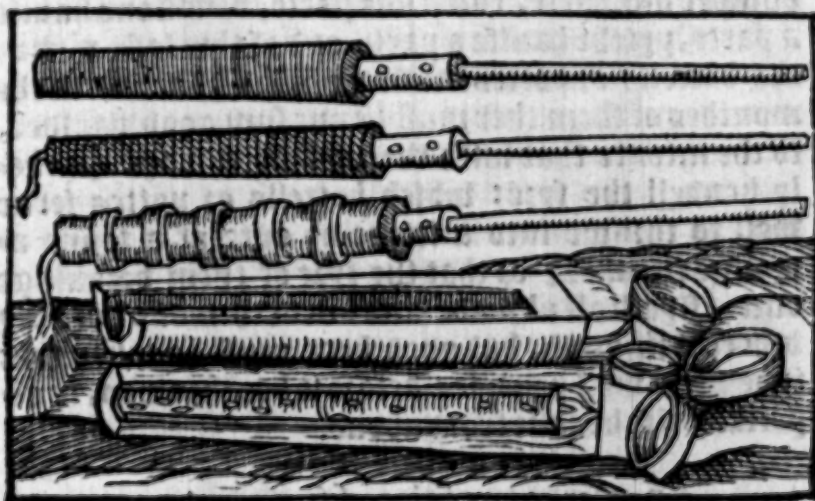
The maner how to make trôbes or trunks of fyre, as vwell to assaulte as to defende a breache, or gate, and to sette a fyre a towne or Campe or
enye thinge else.

Cap. xixx.



Firste cause a cane of good woode to be made at the tozners as bigge as a mās thigbe & the length of an ell, after suche sozte that the hole therof be as wyde that a man maye thruste in his naked arme, & cause that the bottom of the sayd trancke be made in suche wyse with a littell hole, that the staffe of a partesan maye enter into it and so to be made faste therunto, byndinge the sayde trancke with y²o wyre at both endes, & in the middell soz moze suerety that it bryake not, thzough the fury of the fyre. The fill it with this mixture heresollowing. Take serpētīn poulder. iij. pounce, rosen. i. pounce, cāphere hause a pounce, beaten glas. iij. ounses, and mingell euerie thinge together, then begin to fill and putte in the trumbe a handfull of serpentine poulder vnmixte, nexte a handfull of the sozsayde mixture, after a littell poulder, then a stoppell of cotten wet in oile of gīneper, and put in vpon the sayde cotten as you haue don at the firste, that is to saye poulder, and then mixture

ture etc. And thus you muske doo till yow haue filled it full, stampinge in the stufte all wayes lightly, and if so lacke of gineper oile you wette the cotton in aqua vita, it is very good puttinge after euery quantite of poulder a littel quicke siluer, then when it is full, put in the mouthe sum good poulder, makinge it a singell keuer of parchemente bounde aboute with packthred, and with a littell hole in the middesse of the parchemente, wher in you must put a matche made with gunpoulder, the whiche easely and quickly with your common matche maye kindell the fyre, beinge cum to the face of the enemye: whiche is an excellent thinge so the saighte on the sea, or so to disorder a bande of hoysmen.



Hovve to make bottells or pottes of fyre vvorke to
throvve into shippes or emonge men that
are in battaylraye.

Cap. xxx,

Suche



Take yearthē bottells
or pottes as is cōmonly bled
to kepe vineger or oyle and
suche lyke, is beste for this
purpos, whiche muste be fil-
led with this cōposition: ser-
pentine poulder ij. partes, ro-
sen one part, pytche one part,
beating most fynely, al these

thinges together in a moztar, then take turpentine,
and a littell gineper oyle, or linsede oyle, and mingell
them therewith in a caudjon vpon the fyre with a
a sticke of a yarde long, and fill the bottells haulte ful
of this forsayde receipte, that doon, take serpentine
poulder one parte, rosen one parte, bymstone haulte
a parte, pytche haulte a parte, and of this laste mixtur
the bottells or pottes muste be filled vp: then in the
mouthes of them ther must be put sum good poulder,
to the intente that with the matche it maye quicke-
ly kendell the fyre: whiche bottells or pottes serue
well to thzowe into a toune or oute of a toune a-
monge enemies, for that the fyre of them bzakeinge
oute, flyeth all abzoade and burneth moste horribly
where it lighteth, but good hede must be taken that
it be firste well kendeled befoze it bee thzowen, in es-
pettally if it be caste from aboue.

Another composition of fyre vvorke.

Cap. xxix.



Take as many yerthen bottells or pottes
to be made as you liste to haue, whiche
muste be as it wer but haulte baked, then
fill them with this mixture followinge,
serpentine poulder thzee partes, saltepe-
ter one parte, turpentine haulte a parte, pytche haufe
a parte, bymstone one parte, baye salte haulte a part,
and

and when you will throwe them set them on fyre and
se that they bee well kendled.

Balles of mettell to throwe amonge men in battelraye
or other vyse, vvhich breakinge shall doo
vonderfull hurte.

Cap. xxxii.



Disorder and to make the
enemies to giue place, there maye
also be prouided, certaine hollow
balls of mettell as bigge as smalle
boules, and a quarter of an ynche
thicke, caste in mouldes and made
of thre partes of brasse and one of
tinne: but the brasse ought to bee molte befoze the
tinne be put to it, whiche balles filled half full of fyne
cozen poulder, and the other halfe ful, of serpentyne
poulder, myngled with rosen beaten into poulder, so
that for thre partes of serpentine poulder there bee
one parte of rosen: and then putinge in the mouthes
of the holes of them a littel fyne coze poulder to make
the rest to fyre the surer, and after beinge fyrd and
throwen, they will breake and flie into a thousand pe
ces, and bothe hurte and kyl whome so euer is nere
or aboute them. Wherfoze they are verie good to
throwe ouer the walls into a towne or fortreffe, or in
to a campe, to hurte and to gyue a terroze to those that
ar within: but these balles after they ar fyrd and wel
kynndled, and hauing blowen a littell, must be quickle
throwen, leaste they hurte suche as wolde hurle them:
and therfoze the experiance of one, ought firste to bee
made in a close place, to se how longe it will tarie be
foze it breake, and the holes that it will make in diuers
places, whereby the other maye the better be
knownen how to be vsed.

L.i.

Hovve

of Fireworkes.

The maner howve to prepare pottes and bales of fyre
vvorke to throwve vwith hande,

Cap. xxxiii.



In the world there hath
ben allwayes men of suche
pzeugnate wittes, that haue
cccelled in sundrie and infin-
te inuentions, as wel for the
sauegarde of humaine bodies
as also for the destruction of
the like. By whose helpe ther
haue ben Capitaines, which
imitatinge theire councelles, haue caused theire foote-
men to carie in theire handes, certaine pearthen pot-
tes and balles, filled full of a certaine composition of
poulder, or sum vnctus liquo, apte to take fyre quic-
ly: with the whiche incounteringe the enemies in bat-
taille at hande, haue vigozously whozled those among
them, for to proue, whether with suche meanse they
might be able not only to disordey them, but also
to make them giue place, and to ouerthrowe them:
for as muche as suche fyrewozkes will maruelously
hurte the enemies not only with the smoke of them,
but also a greate deall and muche moze with the hor-
rible & vnquenchable burninge of them, so that thereby
suche men haue allwayes had mooste happie succes,
with mooste glorioys laude and prayse. These fyre-
wozkes ar made in this wyse: Take as manie pear-
then pottes or bottelles as you liste, caused to be made
for this purpose, eyther baked or vnbacked whiche ma-
keth no matter, so that the moistenes of the pearthe
be dried vp: and these must be filled halfe full of sepe-
tyne poulder, and sumwhat moze: and the same poul-
der must be mingled with pytche and bymstone bea-
ten to poulder to the quatety of the thirde parte ther-
of:

or then there muste be put vpon it a finger thiknes of
 hogges grease, to the intende that it maye make the
 fire to dure the longer and it beinge in this maner
 ordered, there must be made a hole into it and a peece
 of gunpouldred matche put therin, with a littell good
 poulder, and syringe it, and holdinge it so longe till it
 be well kedled, you shall then thowle it. Also there is
 made a liquide composition in a cauldron, wherein is
 put hogges grease, oyle of stones, bymstone, saltpeter
 twice refined, aqua vite, pytche, turpentyne and sum
 serpentyne poulder: and the pitch, the bymstone and
 the saltpeter beinge liquide, puttinge thereto the
 grease, the turpentyne, the oyle, and the poulder ouer
 the fier, all muste be sturred and mingled together be-
 rie well in an yearthene pottle, or sum other thinge pre-
 pared for the same purpose with a sticke, to the inten-
 te that it maye the better incorporeate: and the it muste
 be keuered about with good poulder, that it maye fier
 the easelier when you will haue it. And that don, you
 maye ocupe it when you will, & whole it either with
 a stringe, or with a corde tyed vnto it, or otherwys
 with the hande as you shall thinke best: also of this
 composition ther maye bee filled certayne littell pur-
 ses of linen clothe, whiche beinge bounde aboute with
 a corde wilbe fashioned lyke a ball: and these maye bee
 wholed or shot oute of trunkes of syre, or otherwys
 as shall please him that maketh them. Also with this
 composition maye bee annoynted what so euer a man
 wolde haue quicklye burnte, as Gates of townes, bys-
 ges of wood, cartes, monitions, and suche lyke, for
 that it is a matter that will sone kendell and set a fyre
 enie thinge, and also able to maintayne it: moreouer
 littell balles therof maye be tyed to the heddes of bar-
 tes to thowle amonge the enemies, or where
 one wolde haue enie thinge
 syred.

of Fireworkes.



Howe to make balles of vvilde fyre, to shoote in
ordinaunce or to throwe vwith
handes.

Cap. xxxiiii.



The serpentis poulder
syue partes, saltpeter refi-
ned iij. partes, bymstone two
partes, kasapina one parte,
Camphere haulfe a parte, tur-
pentine haulfe a parte, haul-
fe a parte of glas grosely bea-
ten, baye salte haulfe a parte
haulfe a parte of oyle of sto-
nes, & oil of linte sed, as much
of the one as of the other, Aqua vite haulf a parte, & all
these thinges beinge mingled together very well, ta-
ke the a pese of canuas as bigge as you will make the
balle, and make it lyke vnto a purse, and fill it with
the sayde mixture, and then make twoo or thye holes
therin with a rounde yron sumwhat bigger then a
bodkin,

hookin, and put in enery hole a littell sticke.

And it is to bee vnderstode that this sozsayde mixture maye bee also made vpon the fyze in a cauldron and the balles that ar made therof muste be rouled in serpentine poulder, and then in the mixture, often tymes keueringe them with toe, well plaistered on, of a good thiknes, then when they shalbe a littell dyed, take the sayde sticke oute of the holes, and fill them haulte full of serpentine poulder, and the other haulte with cozen poulder, and gyuinge fyze to the sayde balles, and thowinge them emonge the enemies, they will doo maruelous and wonderfull hurte. For that the sayde balles will burne within the water, so that fallinge vpon the armor of sowdiers, water cannot quenche them noz eny thinge else, excepte aboundance of myze o2 hurte. And addinge to the sayde mixture that is vnso2d hault a parte of beaten glas and haulte a parte of baye salte, you may fill a trumbe therewith after the maner as I haue taughte a littel afoze.

To trim Targettes vvith fyrevvorke to assaulte, or to defende a breache.

Cap. xxxv.



Et pypes of bras as manie as you liste, and naile them vpon a target, epyther six. viij. o2 ten, and fill the sayde pypes full of the sozsayde mixture vnso2d, and order the pypes after suche sorte that they fyze not altogethe, but one after an other, so that whē one is almost burned oute, the same maye gyue fyze to an other by a littell pype as small as ons finger, that muste gove from the bottom therof to the mouthe of an other, and so successinely to all, whiche shall continue a long tyme, but the sayde target must be

of Fireworkes.

be keuered with blacke buckeram that the fyrewoꝝke be not perceyued and the gyuing of fyre the one to the other.

To make an other kynde of fyrewoꝝke.

Cap. xxxvi.

Take willowe coles, salt peter, aqua vite, bysmuth stone, pitche, resapina, Camphere, oile of stones, vernice liquide, turpentine, as muche of the one as of the other, mingling euery thing together, & then take a littell purse of cannas, and fill it full of serpentine poulder, and keuer the purse all ouer with the soysayde mixture of a good thickness, & with as muche toe as you shall thinke good, and then make a hole that maye gove to the middeste of the halle, whiche muste bee filled full of poulder, so that thereby all the composition therof with a matche maye be set on fyre when you liste.

Hovve to make a mixture in stone that shall kendell fyre vvith vvater or spittell.

Cap. xxxvii.

This stone is very necessary for a Captaine to gyue fyre to his gunners, when thzough soul wether, all their matches shulde happen to golwe oute, and where they cannot kindell them againe bycause of the raïne. Firste take vnflashed lyne one parte, Tutia alexandrina vnprepared one parte, salt peter very wel refined one parte, quicke bysmuth stone twoo partes, Camphere twoo partes, calamine stone one parte: Al these thinges muste bee well beaten and sifted, and bounde harde together with a pese of newe linen clothe, and put into a copell of yeaꝝ the cuppes, suche as golde smithes vse to melte in, the
mon.

mouthes of whiche muste be ioyned together & faste
 bounde with yron wyre, and daubed ouer with lutum
 sapientia that it breate not oute, and then dried a lit-
 tel, till it becom yelow, that don, put it into a fornes
 where they burne brycke or yearthē vessels, and let it
 tarie therein as longe as the brycke or yearthē vessels
 be a bakinge, and then takinge it oute, you shall se it
 made like vnto a bryckstone.

To make an other kinde of stone to kendell fyre
 vvith vvater or spittell,

Cap. xxxviii.

Take Camphere thzee partes, saltepeter well
 refined twoo partes, vnflaked lyme twoo par-
 tes, brymstone twoo partes, all these thinges
 (beinge well beaten together, and put into a
 copell of golde smithes meltinge cuppes well stopped
 with lutum sapientia) muste then be baked in a fornes,
 and when the yearthē vessels be taken oute, this
 shall also be made.

Howve to make lutum sapientia.

Cap. xxxix.



Take of the beste white
 potters earth that you ca get,
 for in one place there is bet-
 ter than in an other, that is
 to saye, of that which can best
 endure the fyre, as suche as
 they make pottes of in Padua,
 and likewise in Germany: for
 it is of such perfectio, that the
 pottes whiche be made of it, and wherein they dresse
 their

Of lutum sapientia.

their meate, may also serue to found metalles in. Take then of the beste, and specially if it must serue for a thing that hath neede to be longe vppon a great fyre, other wise, take suche as you can get. There is founde of it, that is of a grape colour, as the common softe is, and also there is white, that men vse in some place of Vicence, whiche is like loanes of Gypsum, or plaister, and is called of the Italians Florette de Chio. We here in Englande vppo the vse thereof, maye geue it what name we will. Potters vse of it in Venise, for to whitt the dishes, and other thinges, befoze they vernish or pollish them. There is also founde of it that is redde, as in Apulia, where there is greate quatety, and that they call Boale, and is the very same that some Apotaries doo sell for Boale Armenick, and the Venetians vse of it, for to paint redde the soze frotes of their houses with lime, bzicke, and Vermillion, couering it afterwarde with Oyle of line. This redde earth is the fattest, and the clammiest of all the rest, & therefore it cleaueth soonest by the fire, if it be not tempered with some other substance. And because that all the sayed earthes bee to fatte, the one moze than the other, therefore men put to them some leane substance. Nowe, if you take of that of ashe colour, which is most commē, and the lest fatty, you may compose & make it in this maner. Take of the sayed earth foure partes, of cloth-makers flore or shearing, one part, ashes that haue serued in a buck, or other, half a part, drie horse donge, or the dong of an Asse, one part. If you will make it perfecter, put to it a fewe stamped bzickes, and sparkes of yron: let al these thinges be wel stamped, and sifted, that is to saye: the earth the ashes, the horse donge, the bzickes, and the sparkes of yron: than mingle al together, and make it into earth, and make a bedde therof, vpon the whiche you shall caste by little and little, the flore, as equally as you can. This doē, powze to it water,

ter, styrring it well fyrrer with a sticke, and than with a pallet bzoade at the ende. And whā all is well incopozated together as you woulde haue it, laye it vppon some great bozde, and beate it wel, and that a good space with some great stasse oz other instrument of yron, mingling and steering it well, soz the lenger you beate it, the better it is. By this meane you shall haue a berye good claye soz to late oz clay, and toyne violles, flagons of glasse to still with, and bottells of gouzdes soz stilling, and other great thinges, as furnesses and suche like. But he that wil make it with moze ease, let him put the earth only, the flor, and the horse dong, with a fewe ashes. Some put no horse donge to it, & some no flore, accoꝝding to the purpose that thei make it soz. For to stop and close vp the mouthes of stilling glasses, oz violles, to thintēt they take no vent on the fyze, the sayd clay wil be very good: nevertheless men put to it two partes of quicke lime, & the whites of Egges, & then it will be surer to let no thinge vent out but the glasse it self. Al kind of clay oz earth would be kept moist, & redy dyessed soz him that will occupy it continually, but it must not be kepte to watery, noz yet lette to dyle, soz than it woulde serue soz nothinge, seinge that after it is once hardened, a mā can not dresse it any moze to do any good withal. And whan you put water to it, it is mollified by little and little aboue, and is as it were a sauce, but within remaineth harde, and if you put to much water to it, you marre it vtterlye. Wherefoze, whan you see that it beginneth to ware dyle, feed it a newe little and little with water, styrring it tyll it be well, and so shall you make it perfecte.

Howe to make certayn fyrevvorke to rye at the pointes of pykes or horsemenstaues.

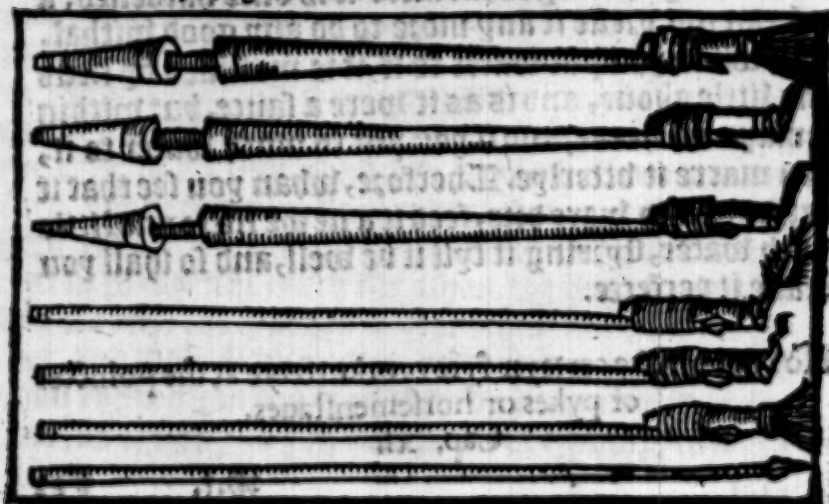
Cap. xl.

¶ 1.

For



Or to assaulte or to defende a bzeache, and also to worke sum pollecy in the nighte against the enemies, it is somtymes good to tye at the poyntes of pykes or launces, certayne canes like vnto squibbes made of paper vpon a soozme of wood as long as the bzeddeth of a sheete of paper, filled full of serpentyne poulder, amongeste the whiche muste be mingled littell peces or crumes of pitche, of bismillon, graines of baye salt, splinges of yron, and beaten glas, arsenic, cristall beaten to peces, and suche lyke, and after they ar closed vp, and tied faste at one of the endes, this composition muste bee well beaten into them, with ther owne sozmes or mouldes: vnto enery one of which there must be put a good matche sod in saltpeter & gunpoulder, and then well dyed, and fasteninge them to staues, after suche sozte that the ysue of the fyze be turned towards the aduersaries, when you thinke good, you or sum other maye fyze them: wher you shall then see the sper blowe oute twoo yardes long, whiche in the night will seme terrible: but in a calme wether, or at leaste when the wynde is in the faces of the enemies they ar best to be vled. And mozeouer soz the saighte on the sea, they ar moste excellento.



Hovve to make diuerſe compositions of fyrevorkes.

Cap. xli.



Every thing that will quicklie burne, and that by ſum proper vertue is apte to multiplie fyre, and maintaine it, maye be put in fyre compositions: ſo that in effecte of ſuche things they are made: of which things ther are ſum that are mynerall, as byſmſtone, and the oyle therof, and ſaltepeter, and ſum other ſubſtances, bot, dyſe, and thſin, and ſum vinctus, as greace, and all ſortes of oyles: ſum verie dyſe, as pytch oꝝ wood: & of theſe there bee ſum naturall, and ſum arteſtiall: But nowe leauinge to ſeke ſuche difference of theire compositions, amonge as manie things as well olde as newe that I knowe, I haue found only theſe: oute of which I haue choſen ſum of the notableſt, ſpettallie theſe, that ſo to make them, there muſte be taken Roſen, Alchitrean, quicke byſmſtone, tartar, ſarcocolla, ſaltepeter, and oyle of ſtones, and of euery one ſum parte, but double ſo much of vnſlaked lime: and all muſte be compounded with the oyle of egges: and put into a beſſell of glas oꝝ pearth that is leaded, and keuered very well: putting it after vnder hot dunge ſo a moneth: then takinge it from theſe and ſetting it ouer a ſoſte fyre, the becell beinge well ſtopped, it muſte be melted: whiche don, the lycos therof maye be put into hollow ſtanes, oꝝ in pearthen bottelles, oꝝ other becelles made of purpoſe: vnto euery one of which, muſte bee put a peeſe of a gunpoudered matche, in the middeſt with ſum gunpouder alſo, to the intent that they maye the eaſelie fier.

Alſo there may be made an other ſorte of fyreworke after this maner: takinge byſmſtone, oꝝ oile of byſmſ-

ſp. y.

ſtone

Stone if it may be had, oyle of stones, or of the same
stone oile of iuniper, saltpeter very well refined: and
for euery portio of suche thinges fyue of aspalto: and
moreouer goosgrease, pure pitch, bernis, poulder of
pigeons dunge, and so muche aqua vite, that maye
thoroughly moyst all the foresayde thinges: which then
muste be put into a vessell of glasse, and the mouth
therof well stopped with waxe, and then put vnder a
hot dungheyl xij. or xxiij. dayes: and after to make it the
better incorporate, it wolde be set ouer a soft fyre: and
that don, this composition maye be put into hollowe
staues, or yearthenn pottes or lyke vesselles to be thow-
wen with the hande: also there maye be taken a bul-
let of stone with a ringe fastened therein, whereunto
wolde be tied a corde of a yarde longe: and aboute
the same stone puttinge the imbreyed with the foresayd
composition, or else peces of linnen clothe all to rayed
therewith, whiche fyrynge, when it is well kenedled,
maye then be thowen. Also balles of this composition
maye be shotte in peces of ordinaunce, or a stone that
hathe a ringe of yron fastened in it, to the which ring
maye be tied a pece of a rope steepled and sod in the for-
sayde composition, or else a littell bagge full therof,
whiche maye be shotte or thowen as one lyfte. More-
ouer balles of this, being made with linnen cloth as a
foze is shewed, maye be caste with all sortes of slinges
whiche waye one wyl.

Also there is made an other composition in this ma-
ner, with verrixe liquide, oyle of quicke bysmstone, &
oyle of the yelkes of egges, turpentine oile, iuniper
oyle, linsede oyle, and olum saxum or oyle of stones,
and haulte as muche of aqua vite as all the sayde com-
positions: and also as muche poulder of bayes synellie
beaten as will suffice to thicken all, with as muche
more saltpeter: and all these thinges muste be put to-
gether in a vessell of glasse, or in a vessell of yearth lea-
ded

bed with a littell moneth, whiche with wer muste be so stopped that it venter not: and this muste bee kepte after thre monethes in hot dung, to putrefie, removinge it euery moneth fower or fyue tymes, and shaking it together euery tyme: and this matter beinge brought in such wyse, when you will occupie it, it is requysit that you anoint the same thing that you will vse, or to put therof into that vessel, where you will haue the fyre to worke: so that the same fyre is suche, that putting thereto sum gunpowder, or a gunpowdered matche, it will straghte waye kendell: and it is so vnquenchable, that it burneth till be, or the thing that it lighteth on, bee altogether consumed: & if this composition fyred chaunce to be thowen and lighte vpon armur, it will make it so glowing redde in such sorte, that he that hath it on his backe, shalbe constrained to put it of, if he will not be burnt to deathe.

Also there is made an other sorte: and it is a molle thin liquo: apte to fyre, with the which if in the canticular daies a pece of wood, or other thing apt to burne bee anointed, the heate of the sun is then able to set it on fyre, and to burne it: and so sone as it is touched with fyre, it kendelet incontinente, and is vnquenchable: except it be choked vp with sande, or wet with very stale vrin, or molle stronge vineger: also it will burne in the water: & making, wherof is in this wise: there muste be taken Camphire, oyle of quicke bzimstone, oyle of turpentine, oyle of dunge, oyle of iuniper, oyle of stoness, oyle of lyntesede, alchitrean, colofonia, molle fynellie beaten, oyle of egges, pytch, goose grease, saltepeter, & as muche aqua vite as all the reste of the composition, and as muche arclinic, tartar, and armoniack salte, as the eyghte parte of alltogether. Whiche thinge muste bee put into a glasse or pot wel stopped, and the set to putrefie in a hot dungill for the space of twoo monethes: & after all the fozsald things

of Fireworkes.

muske bee distilled with a gentle fyre: where within eyght houres, there will cum of those thinges a most suttill lyquor, into the whiche puttinge then so much oredunge dyed in an ouen and moske fynellie beaten to poulder, as maye make it so thicke as sope or sum- what thinner: & after mynding to occupie it, the thing that is to be burnt, muske be annoincted therewith: & this also the Sonne wil set on fyre, and burne what so euer is nere it.

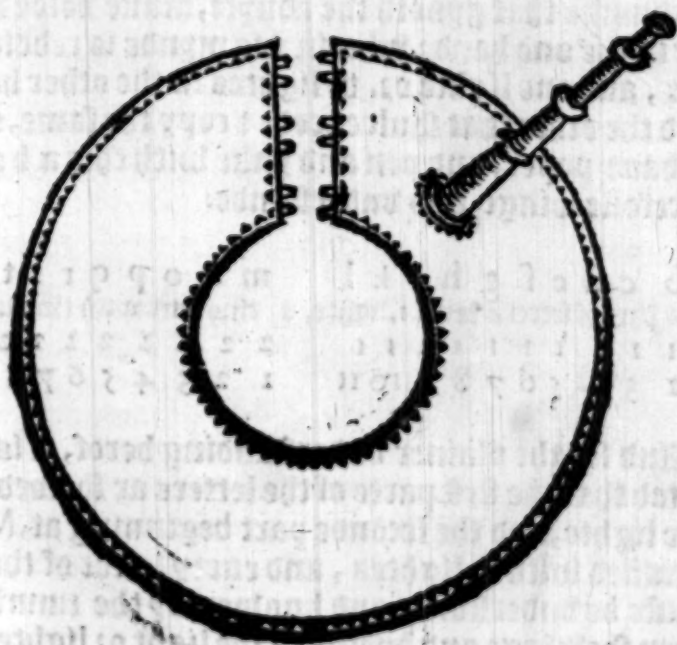
Also there is an other composition of fyre, that anie thinge that is annoincted therewith, will maruelously burne and fyre with wettinge of rayne, or other wyse: which to make, there must be taken newe whitelyme made of flinte, calamite made to poulder by sfer, bitrioll grose beaten the two & thirteth parte, saltepeter refined eyght partes: and as muche camphere as all the foresayde thinges: oyle of quicke bzimstone: oyle of turpentine, salte armoniacke, by waighte as muche as the bitrioll, and as muche tartar and baye salte: salte of bzim, aqua vite made of strong wyne as muche as all the reste of the composition: the whiche thinges compounded together, muske be put lyke as the other wer, into a greate glasse well stopped that it bzeathe not oute: and then it must be set in a hot doungehill for twoo or thye moneths, remouinge the glasse & chaunginge the dounge at leaste euery ten dayes, to thintente that the same matter maye ripen well, and bee lyke vnto a lyquor all of one thinge: the whiche after ought to be boyled so muche vpon a softe sfer, that all the oylie humidetie, and other moystenes that is in it, maye vapo: away, & the rest to becom dyle and stony: and when it is dyle and stony, bzeaking the glasse and takinge it oute, it muske be grounde to poulder: the whiche when it is to be occupied, must be strawed vpo the place that is dyessed for the same purpose, so that it being rayned vpon, or eni maner of wayes wet, will kendell and fall on a fyre.

Hovve

Hovve to make a girdell for Souldiers or Fishers vvherby they may goe in the vvater and passe ouer a riuer vvithoute cyther bridge or bote.

Cap. xlii.

This Girdel ought to be made accordinge to the fation of the sygure nerte folloving, and of suche lether that muste be dyessed in lyke softe, as the same is wher with footebals ar made: wherunto a pype must be fastened lyke vnto a baggepype, so that the girdell, when it is girte aboute a Soudier vpon his armor, may be blown full of wynde: by helpe wherof, he maye then safely passe ouer a riuer, goinge throughe the same, how depe so euer it bee, where he shall not sinke in the water, forther then from the girdell stede downewarde: whiche for men of warre, is very commodius and a moste necessary thng.



Howe

Of sending aduise.

Howe to vvryte, and cause the same that is vvritten to
bee red a far of vvithoute sendinge enie
message. Cap. xliii.



When a Capitayn were so be
seged of enemies in a toune oꝝ foꝝ
tresse that no mā coulde cum vnto
him, oꝝ be sente from him with let-
ters, whereby his mynde, oꝝ the di-
resse and incōuenience that he is
in, mighte of his frendes be vnder-
stonde. Yet his mynde beinge witten, maye of them
notwithstonding in the nighte be red, as farre of as a
lighte can then be seen, and by daye, as farre as a bur-
ninge glas can caste the sun, oꝝ a hat oꝝ any other su-
che lyke marke maye perfectly be decerned, so that the
order therin be firste knowen & agreed vpon betwene
bothe parties. The maner in doyng it in the nighte,
is thus: he that gyueth the aduise, muste holde his let-
ter in the one hande wherin his mynde is reddie writ-
ten, and one lighte oꝝ. ij. lightes in the other hande,
and the other that shulde reede & copy the same, ought
to haue paper, and pen and ynke with this a b c, et c.
heresollowinge, and vnderstande:

a b c d e f g h i k l	m n o p q r s t v w
this part of letters with .i. lighte, &	this part with two lightes.
1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2
1 2 3 4 5 6 7 8 9 10 11	1 2 3 4 5 6 7 8 9 10

And foꝝ the plainer vnderstanding herof, it is to be
noted that the first parte of the letters as shewed with
one lighte, and the seconde part beginning at, M, are
signified with ij. lightes, and every letter of the a b c
muste be vnderstonde and knowen by the number oꝝ
often shewing and hyding of the light oꝝ lightes: As
foꝝ example, if this woꝝde, Man, wer to be witten,
because

Of sending aduise.

because M is the first letter standing in the secōde part.
M must be signified by two lyghtes shewed onse, and
then bydden, and stayed so longe as maye be thought
that he that doeth copy after the light so secretly the
word, and the number diligently marked, maye haue
conuenient tyme to wyte M: then one lighte beinge
shewed onse, & so bydde and stayd, a must be wytten:
for that a is the first letter in the first parte: & agayne
twoo lightes beinge shewed twyse & stayd, n, ought to
be wytten, because n is the second letter in the secōd
parte: which doen, there shalbe wytten Man. And thus
by marking well the number of shewing, byding and
staying of the lightes or lightes, the letter that thereby
is signified, maye moste easily be vnderstande and per-
ceyued. So that after this sorte, there maye be
expressed and wytten what so euer
a man lyke.

P. 1.



When the Britons the au-
 cient inhabitants of this yle (for lacke
 of skilfullnes of warre of their owne, being
 afrayde of the Frankis, & Burgundi, which
 were certaine Barbarous nations, who at
 that time ouerra, spoiled, & possessed France)
 caused the Germanie people called Angles
 to come to ayde & defende them, by whose
 procurement the Angly vnder Clootiger
 their King, taking vpon them the same enterprise, after they had
 once defended them, did then incontinente drive them oute of
 this ylande, remaining here their selues to inhabit: & after their
 name called is Englande: even as also of later dayes, & lyke chasice
 hapned to the Grekes, by calling in the Turkes to helpe them
 agaynst their enemies. which examples, with innumerable lyke
 being well considered, doe moste manifestly shew, howe daunge-
 rous and perillous it is for a Prince & his Realme, to be bound
 to truste to the seruis of straungers, for lacke of sufficient skilfull
 men of their owne for their defence. wherfor Athens my intente
 in setting fourth this booke of Martiall affaires, hath been onely
 to the ende to declare my good will, to haue my naturall countrie-
 men not to be inferior to any in warlyke knowledge, but rather to
 excell in the same, whereby withoute ayde or helpe of any forein
 nation, we may alwayes be most renoumed and famous, I shall
 beseeche all gentill readers, for this my laboz doen for their com-
 beties, to iudge & reporte therof accordingly. And although my
 doynges herin, be not correspondente to my desire, nor to the satis-
 factio of euery mans mynde (which were impossible) yet my truste
 is, & som neuertheless by dilligente reding therof, & imitating the
 example of Lucullus, (who cheslie by studie of lyke bookes, in
 very shorte space, became one of the valiantest & worthiest warrioz
 of all the Romaynes,) may if they liste, take comodity and profit,
 whereby the knowledge in warres, may of suche as neuer haue
 ben trayned in them, be the moze easely gotten and attayned. For
 which cause, my indenuour and trauaile taken herein, for to pro-
 fit this our comon weale, deserueth not vterly to be despyled,
 seeing that the most vertuous yse, and gouernment of Alexander
 Seuerus Emperour of Rome, with manie other Princes, and
 Comd weales, coulde not, being negligent in this kynde of studie
 and practis therof, saue or defende them selues, from moste sha-
 mefull endes, and miserable deathes: wherin fortune was not to
 be

be blanted, but only their folly and ignorance, for having never
thought in time of tranquillity and peace, that it could change
in to adversity and trouble: the which is a comon fault of
men, not to make accompte in sayle weather,
of the tempest to come.

of the tempest to come.

It is a common mistake to think that the only way to avoid a bad investment is to avoid all investments. This is not true. The key is to do your homework and make informed decisions. For example, if you are considering a real estate investment, you should research the market, the property, and the potential returns. You should also consult with a professional advisor, such as a real estate agent or a financial planner, to help you make the best decision for your situation.

Patent Office, Washington, D.C.

It may be right to make a note of the points raised to support the motion.

time they tried to let speak the Eritrean people.

[illegible]

and three of the other
is, especially where there is an injury to the

Call, write to or visit the following:

(The following information was obtained from a review of the records of the Department of Social Services, State of New York, Office of Child Welfare, dated 10/1/78.)

of values of the statistic.

many men.

Small, dark, and very hard, the wood is very difficult to work with. It is very hard and very strong, and is used for many purposes. It is very hard and very strong, and is used for many purposes. It is very hard and very strong, and is used for many purposes.

atention.

The following are some of the most common types of errors found in the above-mentioned documents:

0131

The Table of the additions.



- A** Perfecte rule to bying men into a square battell, of what number so euer they be. Fol. y.
- To know how many me may marche in a ranke, and at a suddain to byng them into a sower square battell, so that their Ansigne, may come to be in the middest. ly.
- How to ordeine a number of men o; an armie into a battell, lyke vnto a wedge, o; thzee square, so that it may be apte to marche with the poincte therof towarde the enemies. vi.
- To make the battell called the sheeres, which in olde time they vsed to set against the Triangell. vy.
- What auantage it is to order men in a triangell battell against the enemie, that knoweth not how to make the battell called the Sheeres to set against it, inesppecially where there is as many men of the one parte as of the other viij.
- To byng a number of men o; an armie, into a battell, whiche in olde time was called a Sawe. ix.
- To fashion a battell of a number of men o; an armie lyke vnto twoo Triangels toygned together, so that they may be apte to marche with a cozner therof towarde the enemies. x.
- What is best to be doen where the ordynance of the enemies beinge shotte into the Armie hath slayne many men. xi.
- Howe to chaunge with speede an Army, that is, in battellraye sower square, into a triangell sation, without diso;dering the firste rankes, and without perrill of confusion. xij.
- Of the perfecte forme o; sation of strong places. xiii.
- The strongest and perfectes sation of all other for the building of y coztin o; wal of a toun o; fortres. xviij.
- An example of the quadzant forme to p;oue that it can seth

The Table of the additions.

Test debilitie and weaknes.	xxij.
Of the nature of Saltpeter, and the maner howe to make and refine it.	xxij.
The maner howe to make all sortes of Gunpowder.	xxij.
Fol.	xxij.
The maner that is vled of charging and shooting of ordinaunce.	xxij.
How to get oute quickly the nalles that shuld happen by treason, or other wyse to be dyuen into the touchholes of ordinaunce.	xxij.
How much the artillery ought to be esteemed of the armies now adayes, and whether the same opinion of them which is had vniuersally, be true.	xxij.
Of Pyynes and placing of powder undergrounde, wherewith inuincible fortresses, by fire maye bee ruinated, when ordinaunce cannot bee broughte vnto them.	xxvij.
The maner howe to make trombes or trukes of fyre, as well to assaulte as to defende a breache, or gate, and to sette a fyre a toun or Campe, or enie thing els.	xxvij.
How to make bottells or pottes of fyrewooke to throw into shippes, or amonge men that are in battellray.	xl.
Fol.	xl.
An other composition of fyrewooke.	xl.
Balles of mettell to throwe among men in battellraye or other wyse, which breaking shall doe wonderful hurte.	xl.
The maner howe to prepare pottes and balles of fyrewooke to throwe with hande.	xl.
Howe to make balles of wilde fyre, to shoote in ordinaunce or to throwe with handes.	xl.
To trim Targettes with fyrewooke to assaulte, or to defende a breache.	xl.
To make an other kynde of fyrewooke.	xl.
Howe	

The Table of the additions.

How to make a mixture in stone that shall kendell
 fyre with water or spittell. rlty.

How to make an other kynd of stone, to kendell fyre with
 water or spittell. rlty.

How to make lutum sapientia. rlty.

How to make certayn fireworke, to tye at the poyncts
 of pykes or hozlemenstaues. rlb.

How to make diuerse compositions of fyreworkes.

How to make a girbell for souldiers or Fishers
 wherby they may goe in the water and passe over
 a river withoute eyther brydge or bote. rlty.

How to write, and cause the same that is written to
 bee red a far, of, withoute sendinge enie message.

Fol. rlty.

The Ende.

The manner how to make truncheons of fyre
 as well to defende as to burne, of fyre
 and to keepe a fyre house as a house, of
 fyre.

How to make bottles of fyre, of fyre
 into bottles, of fyre, of fyre, of fyre.

The other composition of fyreworkes.

Balles of metal to shote among men in battell
 as other wayes, which shewing shall be manifest.

The manner how to prepare bottles and ballies of fyre
 to shote with handes.

How to make ballies of fyre, to shote in
 handes, of fyre, of fyre, of fyre.

The manner how to shote with handes, of
 fyre, of fyre, of fyre.

The manner how to shote with handes, of
 fyre, of fyre, of fyre.

The manner how to shote with handes, of
 fyre, of fyre, of fyre.

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